

SMCJ TVS ESD Suppression Diodes DO-214AB-2 SMCJ90CA Surface Mount

Basic Information

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Price:
- Delivery Time:
- Supply Ability:

Shenzhen, Guangdong, China SOCAY

UL,REACH,RoHS,ISO

Negotiable

5-8 work days

100000pcs

TVS Diodes

-55 To +150

Surface Mount

TVS ESD Suppression Diodes, SMCJ ESD Suppression Diodes

SOCAY

- SMCJ90CA
- Minimum Order Quantity: 3000PCS

SOCAY®



Product Specification

- SMCJ90CA Name:
- SMCJ90CA Package Type: DO-214AB/SMC
- SMCJ90CA Vrwm: 90V
- SMCJ90CA Vbr@It (Min.): 100V
- SMCJ90CA Vbr@lt (Max.): 111V
- SMCJ90CA It: 1mA
- 162V • SMCJ90CA Vc@lpp:
- SMCJ90CA lpp: 9.26A
- SMCJ90CA Ir@Vrwm: 1000µA
- Storage Temperature Range:
- Package Size:
- SMCJ90CA Brand:
- Highlight:





Our Product Introduction

SMCJ TVS ESD Suppression Diodes DO-214AB-2 SMCJ90CA Surface Mount

DATASHEET: SMDJ_v2107.1 .pdf

TVS ESD Suppression Diodes Description:

The SMCJ serie SMCJ90CA is designed specifically to protect sensitive electronic equipment from voltage transients induced by lightning and other transient voltage events.

TVS ESD Suppression Diodes Features:

SMCJ90CA is for surface mounted applications in order to optimize board space SMCJ90CA 's leakage is very low SMCJ90CA is a Bidirectional unit Glass passivated junction It has Low inductance It has Excellent clamping capability 1500W Peak power capability at 10 × 1000µs waveform Repetition rate (duty cycle):0.01% Fast response time: typically less than 1.0ps from 0 Volts to VBR min Typical IR less than 5µA above 12V. High Temperature soldering: 260°C/40 seconds at terminals Typical maximum temperature coefficient $\Delta VBR = 0.1\% \times VBR@25^{\circ}C \times \Delta T$ Plastic package has Underwriters Laboratory Flammability 94V-0 Matte tin lead-free Plated Halogen free and RoHS compliant Typical failure mode is short from over-specified voltage or current Whisker test is conducted based on JEDEC JESD201A per its table 4a and 4c IEC-61000-4-2 ESD 15kV(Air), 8kV (Contact) ESD protection of data lines in accordance with IEC 61000-4-2 (IEC801-2)

EFT protection of data lines in accordance with IEC 61000-4-4 (IEC801-4)

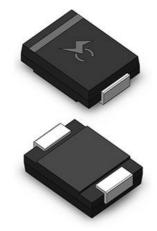
TVS ESD Suppression Diodes Electrical Characteristics(T_A=25 unless otherwise noted) :

		Marking		Reverse Stand-Off Voltage VRWM (V)			Test Curren t IT (mA)	Maximum Clamping Voltage VC @IPP (V)	Maximum Peak Pulse Current IPP (A)	Maximum Reverse Leakage IR @VRWM (μΑ)
1-	Bi	Uni	Bi		MIN	MAX				
A	SMCJ45C A	GFV	BFV	45.0	50.00	55.30	1	72.7	20.63	5
A	SMCJ48C A	GFX	BFX	48.0	53.30	58.90	1	77.4	19.38	5
SMCJ51 A	SMCJ51C A	GFZ	BFZ	51.0	56.70	62.70	1	82.4	18.20	5
SMCJ54 A	SMCJ54C A	GGE	BGE	54.0	60.00	66.30	1	87.1	17.22	5
SMCJ58 A	SMCJ58C A	GGG	BGG	58.0	64.40	71.20	1	93.6	16.03	5
A	SMCJ60C A	GGK			66.70	73.70	1	96.8	15.50	5
SMCJ64 A	SMCJ64C A	GGM	BG M	64.0	71.10	78.60	1	103.0	14.56	5
SMCJ70 A	SMCJ70C A	GGP	BGP	70.0	77.80	86.00	1	113.0	13.27	5
SMCJ75 A	SMCJ75C A	GGR	BGR	75.0	83.30	92.10	1	121.0	12.40	5
SMCJ78 A	SMCJ78C A	GGT	BGT	78.0	86.70	95.80	1	126.0	11.90	5
SMCJ80 A	SMCJ80C A	GGB	BGB	80.0	88.80	97.60	1	129.6	11.57	5
SMCJ85 A	SMCJ85C A	GGV	BGV	85.0	94.40	104.00	1	137.0	10.95	5
SMCJ90 A	SMCJ90C A	GGX	BGX	90.0	100.00	111.00	1	146.0	10.27	5

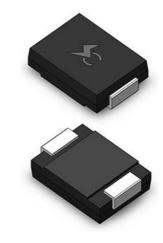
Part N	lumber	Marking		Reverse Breakdown Voltage Vex (V) Stand-Off @IT			Test Current	Maximum Clamping Voltage	Maximum Peak Pulse	Maximu Revers Leakage
Uni	Bi	Uni	Bi	Voltage V _{RVM} (V)	MIN	MAX	l _T (mA)	Vc @lep (V)	Current IPP (A)	@Vm (μA)
SMDJ5.0A	SMDJ5.0CA	RDE	DDE	5.0	6.40	7.00	10	9.2	326.09	1000
SMDJ6.0A	SMDJ6.0CA	RDG	DDG	6.0	6.67	7.37	10	10.3	291.26	1000
SMDJ6.5A	SMDJ6.5CA	RDK	DDK	6.5	7.22	7.98	10	11.2	267.86	500
SMDJ7.0A	SMDJ7.0CA	PDM	DDM	7.0	7.78	8.60	10	12.0	250.00	200
SMDJ7.5A	SMDJ7.5CA	PDP	DDP	7.5	8.33	9.21	1	12.9	232.56	100
SMDJ8.0A	SMDJ8.0CA	PDR	DDR	8.0	8.89	9.83	1	13.6	220.59	50
SMDJ8.5A	SMDJ8.5CA	PDT	DDT	8.5	9.44	10.40	1	14.4	208.33	25
SMDJ9.0A	SMDJ9.0CA	PDV	DDV	9.0	10.00	11.10	1	15.4	194.81	10
SMDJ10A	SMDJ10CA	PDX	DDX	10.0	11.10	12.30	1	17.0	176.47	5
SMDJ11A	SMDJ11CA	PDZ	DDZ	11.0	12.20	13.50	1	18.2	164.84	5
SMDJ12A	SMDJ12CA	PEE	DEE	12.0	13.30	14.70	1	19.9	150.75	5
SMDJ13A	SMDJ13CA	PEG	DEG	13.0	14.40	15.90	1	21.5	139.53	5
SMDJ14A	SMDJ14CA	PEK	DEK	14.0	15.60	17.20	1	23.2	129.31	5
SMDJ15A	SMDJ15CA	PEM	DEM	15.0	16.70	18.50	1	24.4	122.95	5
SMDJ16A	SMDJ16CA	PEP	DEP	16.0	17.80	19.70	1	26.0	115.38	5
SMDJ17A	SMDJ17CA	PER	DER	17.0	18.90	20.90	1	27.6	108.70	5
SMDJ18A	SMDJ18CA	PET	DET	18.0	20.00	22.10	1	29.2	102.74	5
SMDJ19A	SMDJ19CA	PEB	DEB	19.0	21.10	23.30	1	30.8	97.47	5
SMDJ20A	SMDJ20CA	PEV	DEV	20.0	22.20	24.50	1	32.4	92.59	5
SMDJ22A	SMDJ22CA	PEX	DEX	22.0	24.40	26.90	1	35.5	84.51	5
SMDJ24A	SMDJ24CA	PEZ	DEZ	24.0	26.70	29.50	1	38.9	77.12	5
SMDJ26A	SMDJ26CA	PFE	DFE	26.0	28.90	31.90	1	42.1	71.26	5
SMDJ28A	SMDJ28CA	PFG	DFG	28.0	31.10	34.40	1	45.4	66.08	5
SMDJ30A	SMDJ30CA	PFK	DFK	30.0	33.30	36.80	1	48.4	61.98	5
SMDJ33A	SMDJ33CA	PFM	DFM	33.0	36.70	40.60	1	53.3	56.29	5
SMDJ36A	SMDJ36CA	PFP	DFP	36.0	40.00	44.20	1	58.1	51.64	5
SMDJ40A	SMDJ40CA	PFR	DFR	40.0	44.40	49.10	1	64.5	46.51	5
SMDJ43A	SMDJ43CA	PFT	DFT	43.0	47.80	52.80	1	69.4	43.23	5
Part N	lumber	Mar	king	Reverse Stand-Off Voltage	Voltage	down : V _{BR} (V) ?I _T	Test Current Ir	Maximum Clamping Voltage	Maximum Peak Pulse	Maxim Rever Leakag
Uni	Bi	Uni	Bi	Stand-Off Voltage VRWM (V)	Voltage Ø MIN	down V _{BR} (V) VIT MAX	Test Current Ir (mA)	Clamping Voltage Vc @lee (V)	Peak Pulse Current IPP (A)	Maxim Rever Leakag @V _{Ri} (µA)
Uni SMDJ45A	Bi SMDJ45CA	Uni PFV	Bi	Stand-Off Voltage VRWM (V) 45.0	Voltage Ø MIN 50.00	down Vs⊭ (V) 2I⊤ MAX 55.30	Test Current Ir (mA)	Clamping Voltage Vc @lep (V) 72.7	Peak Pulse Current IPP (A) 41.27	Maxim Rever Leakag @Vra (µA) 5
Uni SMDJ45A SMDJ48A	BI SMDJ45CA SMDJ48CA	Uni PFV PFX	Bi DFV DFX	Stand-Off Voltage VRWM (V) 45.0 48.0	Voltage MIN 50.00 53.30	down V sR (V) PT MAX 55.30 58.90	Test Current hr (mA) 1	Clamping Voltage Vc (@lep (V) 72.7 77.4	Peak Pulse Current IPP (A) 41.27 38.76	Maxim Rever Leakag @Vrr (μΑ 5
Uni SMDJ45A SMDJ48A SMDJ51A	Bi SMDJ45CA SMDJ48CA SMDJ51CA	Uni PFV PFX PFZ	Bi DFV DFX DFZ	Stand-Off Voltage Vrewm (V) 45.0 48.0 51.0	Voltage MIN 50.00 53.30 56.70	MAX 55.30 62.70	Test Current Ir (mA) 1 1 1	Clamping Voltage Vc (Diep (V) 72.7 77.4 82.4	Peak Pulse Current IPP (A) 41.27 38.76 36.41	Maxim Rever Leakag @Vav (μΑ) 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A	BI SMDJ45CA SMDJ48CA SMDJ51CA SMDJ54CA	Uni PFV PFX PFZ RGE	Bi DFV DFX DFZ DGE	Stand-Off Voltage VRWM (V) 45.0 48.0 51.0 54.0 54.0	Voltage MIN 50.00 53.30 56.70 60.00	Cdown ≥ Vss (V) ≥ L- MAX 55.30 58.90 62.70 66.30	Test Current hr (mA) 1	Clamping Voltage Vc (@lep (V) 72.7 77.4 82.4 87.1	Peak Puise Current IPP (A) 41.27 38.76 36.41 34.44	Maxim Rever Leakag @Vra (µA) 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A	BI SMDJ45CA SMDJ48CA SMDJ51CA SMDJ54CA SMDJ58CA	Uni PFV PFX PFZ RGE PGG	Bi DFV DFX DFZ DGE DGG	Stand-Off Voltage Vrevsal (V) 45.0 48.0 51.0 54.0 58.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40	down Vss (V) PT MAX 55.30 58.90 62.70 66.30 71.20	Test Current Hr (mA) 1 1 1 1 1 1 1	Clamping Vottage Vc Qter (V) 72.7 77.4 82.4 87.1 93.6	Peak Pulse Current Ize (A) 41.27 38.76 36.41 34.44 32.05	Maxim Rever Leakag @Ver (μΑ) 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ50A	BI SMDJ45CA SMDJ48CA SMDJ51CA SMDJ54CA SMDJ58CA SMDJ58CA	Uni PFV PFX PFZ RGE PGG PGK	Bi DFV DFX DFZ DGE DGG DGK	Stand-Off Voltage Vnvxx (V) 45.0 48.0 51.0 54.0 58.0 60.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70	MAX 55.30 58.90 62.70 66.30 71.20 73.70	Test Current Hr (mA) 1 1 1 1 1 1 1 1	Clamping Voltage Vc (2)lep (V) 72.7 77.4 82.4 87.1 93.6 96.8	Peak Pulse Current IPP (A) 41.27 38.76 36.41 34.44 32.05 30.99	Maxim Rever Leakag (µA) 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ60A	BI SMDJ45CA SMDJ48CA SMDJ51CA SMDJ58CA SMDJ58CA SMDJ60CA SMDJ64CA	Uni PFV PFX PFZ RGE PGG PGK PGM	Bi DFV DFX DFZ DGE DGG DGK DGM	Stand-Off Voltage Vnrvst (V) 45.0 48.0 51.0 54.0 58.0 60.0 64.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10	(down V me (V) hr MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60	Test Current hr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1	Clamping Voltage Vo (2) (v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0	Peak Puise Current Ier (A) 41.27 38.76 36.41 34.44 32.05 30.99 29.13	Maxim Rever Leakag @Vra (µA 5 5 5 5 5 5 5 5
Uni SMDJ46A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ60A SMDJ60A	BI SMDJ45CA SMDJ48CA SMDJ61CA SMDJ54CA SMDJ58CA SMDJ60CA SMDJ60CA SMDJ64CA	Uni PFV PFX PFZ RGE PGG PGK PGM	BI DFV DFX DFZ DGE DGG DGK DGM DGP	Stand-Off Voltage Vnxxx (V) 45.0 48.0 51.0 54.0 58.0 60.0 64.0 70.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80	MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00	Test Current (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Clamping Voltage Vo (2)er (V) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 1113.0	Peak Puise Current Iee (A) 41.27 38.76 36.41 34.44 32.05 30.99 29.13 26.55	Maxim Rever Leakag @Ver (µA 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ46A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ60A SMDJ60A SMDJ70A	BI SMDJ45CA SMDJ48CA SMDJ51CA SMDJ54CA SMDJ60CA SMDJ60CA SMDJ60CA SMDJ70CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGP	BI DFV DFX DFZ DGE DGG DGK DGM DGP DGR	Stand-Off Voltage Verval (V) 45.0 48.0 51.0 54.0 58.0 60.0 64.0 70.0 75.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 666.70 71.10 77.80 83.30	MAX 55:30 58:90 62:70 66:30 71:20 73:70 78:60 86:00 92:10	Test Current rr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Clamping Voltage Voltage Veter (V) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0	Peak Pulse Current i=> (A) 41.27 38.76 36.41 34.44 32.05 30.99 29.13 26.55 24.79	Maxim Rever Leakag @Vev (µA 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ60A SMDJ60A SMDJ76A SMDJ75A SMDJ78A	BI SMDJ45CA SMDJ48CA SMDJ61CA SMDJ51CA SMDJ60CA SMDJ60CA SMDJ60CA SMDJ70CA SMDJ75CA SMDJ78CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGP PGR PGT	B) DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGT	Stand-Off Voltage Varias (V) 45.0 48.0 51.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70	MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80	Test Current Fr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Clamping Voltage Vegeber(v) 72:7 77:4 82:4 87:1 93:6 96:8 103:0 113:0 121:0 126:0	Peak Pulse Current izz.(A) 41.27 38.76 38.76 38.76 38.76 30.99 29.13 26.55 24.79 23.81	Maxim Rever Leakag @Ver 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ78A SMDJ78A	Bi SMDJ45CA SMDJ48CA SMDJ51CA SMDJ54CA SMDJ60CA SMDJ60CA SMDJ60CA SMDJ70CA SMDJ70CA SMDJ78CA SMDJ78CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGP PGR PGR	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGR DGT DGB	Stand-Off Voltage Varia<(V)	Voltage (a) MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80	MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60	Test Current Fr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Clamping Voltage Vegelse (v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0	Peak Pulse Current 127 (A) 38.76 38.76 38.76 38.41 34.44 32.05 30.99 29.13 26.55 24.79 23.81 23.15	Maxim Rever Leakag (22Ver (μA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ56A SMDJ66A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A	Bi SMDJ45CA SMDJ48CA SMDJ51CA SMDJ54CA SMDJ60CA SMDJ60CA SMDJ60CA SMDJ70CA SMDJ76CA SMDJ78CA SMDJ78CA SMDJ80CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGR PGR PGT PGB PGV	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGT DGB DGV	Stand-Off Voltage Varia<(V)	Voltage (a) MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40	MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00	Test Current Fr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Clamping Voltage Vc (215+7) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0	Peak Pulse Current 127 (A) 38.76 36.41 34.44 32.05 30.99 29.13 26.55 24.79 23.81 23.15 21.90	Maxim Rever Leaksg 20 Ver (µA 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ56A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A	BI SMDJ45CA SMDJ48CA SMDJ61CA SMDJ51CA SMDJ60CA SMDJ60CA SMDJ60CA SMDJ70CA SMDJ70CA SMDJ70CA SMDJ70CA SMDJ70CA SMDJ80CA SMDJ80CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGP PGR PGR PGT PGB PGV PGX	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGR DGB DGV DGX	Stand-Off Voltage Voltage 45.0 45.0 51.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0	Voltage (2) MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 83.30 86.70 83.80 94.40 100.00	down Vac (V) MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 96.00 92.10 95.80 97.60 104.00 111.00	Test Current Ir (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (gtbs/tv) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 146.0	Peak Pulse Current 127 (A) 41.27 38.76 36.41 34.44 32.05 30.99 29.13 26.55 24.79 23.81 23.15 21.90 20.55	Maxim Rever Leaksg (2) Vax (1) La 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ70A	Bi SMDJ45CA SMDJ48CA SMDJ51CA SMDJ54CA SMDJ64CA SMDJ64CA SMDJ64CA SMDJ76CA SMDJ78CA SMDJ78CA SMDJ78CA SMDJ78CA SMDJ80CA SMDJ80CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGP PGR PGR PGT PGS PGX PGZ	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGR DGT DGB DGV DGX	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0	Voltage (a) MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00	down Ware (V) MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00	Test Current fr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (gtber (v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 146.0 162.0	Peak Pulse Current br (J) 38.76 36.41 34.44 32.05 30.99 29.13 26.55 24.79 23.81 23.15 21.90 20.55 18.52	Maxim Rever Leaksg (())A 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ50A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ86A SMDJ90A SMDJ90A	Bi SMDJ45CA SMDJ45CA SMDJ51CA SMDJ54CA SMDJ64CA SMDJ64CA SMDJ64CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ78CA SMDJ86CA SMDJ86CA SMDJ90CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGP PGR PGR PGT PGB PGV PGZ PHE	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGR DGR DGR DGV DGX DGZ DHE	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 1122.00	down Wtw MAX 55:30 56:30 58:90 62:70 66:30 71:20 73:70 78:60 86:00 92:10 95:80 97:60 104.00 111:00 123:00 135:00	Test Current hr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (gtbr/v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 146.0 162.0 177.0	Peak Pulse Current br (J) 38.76 36.41 34.44 32.05 30.99 29.13 26.65 24.79 23.81 23.15 21.90 20.55 18.52 16.95	Maxim Rever Leaksg @20% 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ50A SMDJ50A SMDJ70A SMDJ75A SMDJ76A SMDJ76A SMDJ70A SMDJ85A SMDJ80A SMDJ100A SMDJ110A	Bi SMDJ45CA SMDJ45CA SMDJ51CA SMDJ54CA SMDJ64CA SMDJ60CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ86CA SMDJ80CA SMDJ80CA SMDJ90CA SMDJ100CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGM PGP PGR PGR PGT PGB PGV PGZ PGZ PHE PHG	Bi DFV DFX DFZ DGE DGG DGK DGM DGR DGR DGR DGR DGR DGV DGX DGZ DHE DHG	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 75.0 75.0 78.0 80.0 85.0 90.0 110.0 120.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 122.00 133.00	Howen Ware (V) MAX 55:30 58:90 62:70 66:30 71:20 73:70 78:60 86:00 92:10 95:80 97:60 104.00 111.00 123:00 136:00 147.00	Test Current hr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (281=971) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 146.0 162.0 177.0 193.0	Peak Pulse Current br (J) 36,41 34,44 32,05 30,99 29,13 26,65 24,79 23,81 23,15 21,90 20,55 18,52 16,95 15,54	Maxim Revet (μA 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ86A SMDJ100A SMDJ110A SMDJ120A	Bi SMDJ45CA SMDJ45CA SMDJ51CA SMDJ54CA SMDJ64CA SMDJ64CA SMDJ64CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ80CA SMDJ80CA SMDJ90CA SMDJ100CA SMDJ100CA SMDJ120CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGS PGZ PGX PGZ PHE PHG PHK	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGR DGR DGT DGB DGV DGX DGZ DHE DHG DHK	Stand-Off Voltage Voltage 45.0 48.0 61.0 64.0 68.0 60.0 64.0 75.0 76.0 80.0 85.0 90.0 110.0 120.0 130.0	Voltage () MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 122.00 133.00 144.00	down Was (V) MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00	Test Current hr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (281=9 (v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 146.0 162.0 177.0 193.0 209.0	Peak Pulse Current br (J) 38,76 36,41 34,44 32,05 30,99 29,13 26,66 24,79 23,81 23,15 21,90 20,55 18,52 16,95 15,54 14,35	Maxim Reveters (µA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ86A SMDJ100A SMDJ1100A SMDJ110A	Bi SMDJ45CA SMDJ45CA SMDJ51CA SMDJ54CA SMDJ64CA SMDJ64CA SMDJ64CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ80CA SMDJ80CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGS PGX PGX PHE PHG PHK	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGR DGR DGR DGR DGS DGZ DHE DHG DHK DHB	Stand-Off Voltage Vonce (V) 45.0 48.0 61.0 64.0 68.0 60.0 64.0 75.0 76.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 122.00 133.00 144.00 155.00	Howen MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00	Test Current hr (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (281=9 (v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 146.0 162.0 177.0 193.0 209.0 226.8	Peak Pulse Current br (J) 38,76 36,41 34,44 32,05 30,99 29,13 26,66 24,79 23,81 23,15 21,90 20,55 18,52 18,55 15,54 14,35 13,23	Maxim Rever Leakag @20% 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ58A SMDJ60A SMDJ75A SMDJ75A SMDJ75A SMDJ75A SMDJ75A SMDJ75A SMDJ70A SMDJ100A SMDJ100A SMDJ110A SMDJ110A	BI SMDJ45CA SMDJ45CA SMDJ51CA SMDJ54CA SMDJ64CA SMDJ64CA SMDJ64CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ86CA SMDJ80CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGS PGZ PHE PHG PHK PHB	Bi DFV DFX DFZ DGE DGG DGK DGM DGP DGR DGR DGR DGR DGR DGR DGR DGS DGV DGX DGZ DHE DHG DHK DHB	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0	Voltage (2) MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00	How n MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00	Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (2) (2) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 146.0 162.0 177.0 193.0 209.0 226.8 243.0	Peak Pulse Current Jer (A) 38,76 36,41 34,44 32,05 30,99 29,13 26,56 24,79 23,81 23,15 21,90 20,55 18,52 16,95 15,54 14,35 13,23 12,35	Maxim Revete (μΑ φ) φ φ φ φ φ φ φ φ φ φ φ φ φ φ φ φ φ φ
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ56A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ100A SMDJ1100A SMDJ1100A SMDJ1100A SMDJ140A SMDJ140A	BI SMDJ45CA SMDJ45CA SMDJ51CA SMDJ54CA SMDJ64CA SMDJ64CA SMDJ64CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ85CA SMDJ85CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGS PGZ PHE PHG PHK PHB PHM	Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGR DGR	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0	Voltage (e) MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00 178.00	Howen MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 185.00 197.00	Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (2) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 124.0 129.6 137.0 129.6 137.0 146.0 162.0 177.0 193.0 209.0 226.8 243.0 259.0	Peak Pulse Current Jacobs 2007 2007 2007 2007 2007 2007 2007 200	Maxim Rever Leakag (μ) 5
Uni SMDJ45A SMDJ45A SMDJ45A SMDJ51A SMDJ54A SMDJ54A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ70A SMDJ70A SMDJ70A SMDJ100A SMDJ110A	Bi SMDJ45CA SMDJ45CA SMDJ45CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ8CA SMDJ8CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGS PGZ PHE PHG PHR PHB PHM	Bi DFV DFX DFZ DGE DGG DGK DGM DGR DGR DGR DGR DGR DGR DGR DGS DGV DGX DGZ DHE DHG DHR DHB DHM	Stand-Off Voltage Voltage 45.0 48.0 51.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 66.70 71.10 77.80 83.30 88.70 88.80 94.40 100.00 111.00 112.00 133.00 144.00 155.00 155.00 178.00 189.00	Hown Ware (V) MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 185.00 197.00 209.00	Test Current transmission 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (281=9 (V) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 124.0 129.6 137.0 146.0 162.0 177.0 193.0 209.0 226.8 243.0 259.0 275.0	Peak Pulse Current Jacobs 38,76 36,41 34,44 32,05 30,99 29,13 26,55 24,79 23,81 23,15 21,90 20,55 18,52 16,95 15,54 14,35 13,23 12,35 11,58 10,91	Maxim Revete (μΑ) (μΑ) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ45A SMDJ54A SMDJ54A SMDJ54A SMDJ54A SMDJ54A SMDJ54A SMDJ60A SMDJ64A SMDJ64A SMDJ64A SMDJ64A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ100A SMDJ110A	BI SMDJ45CA SMDJ45CA SMDJ5CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ8CA SMDJ8CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGR PGR PGR	Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGS DGV DGX DGZ DHE DHE DHE DHB DHR DHP DHR	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 111.00 111.00 113.00 144.00 155.00 167.00 178.00 189.00 201.00	How n MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 135.00 147.00 159.00 171.00 185.00 197.00 209.00 220.00	Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (2)=v(V) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 124.0 129.6 137.0 129.6 137.0 146.0 129.6 137.0 146.0 177.0 193.0 209.0 226.8 243.0 259.0 275.0 291.6	Peak Pulse Current Jacob	Maxim Revet Leakage (µA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ45A SMDJ45A SMDJ51A SMDJ54A SMDJ54A SMDJ56A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ75A SMDJ76A SMDJ76A SMDJ70A SMDJ100A SMDJ110A	BI SMDJ45CA SMDJ45CA SMDJ5CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ76CA SMDJ76CA SMDJ78CA SMDJ8CA SMDJ8CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGR PGR PGR	Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGR DGR	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 88.80 94.40 100.00 111.00 111.00 111.00 155.00 167.00 178.00 189.00 201.00 201.00 211.00	How n MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 92.10 95.80 92.10 104.00 111.00 123.00 135.00 147.00 159.00 171.00 185.00 197.00 209.00 220.00 232.00	Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Vc (2)=v(V) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 124.0 129.6 137.0 129.6 137.0 129.6 137.0 146.0 177.0 193.0 209.0 226.8 243.0 259.0 275.0 291.6 307.8	Peak Pulse Current Jacob	Maxim Reveted (pA) (pA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ45A SMDJ45A SMDJ51A SMDJ54A SMDJ56A SMDJ56A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ76A SMDJ76A SMDJ80A SMDJ80A SMDJ100A SMDJ110A SMDJ110A <	BI SMDJ45CA SMDJ45CA SMDJ5CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ8CA SMDJ8CA SMDJ100CA SMDJ100CA <t< td=""><td>Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGS PGV PGS PGS PGV PGS PGV PGS PGV PGS PHE PHR PHR PHR PHR PHT PHV PHW</td><td>Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGR DGR</td><td>Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0</td><td>Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.80 94.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00 178.00 189.00 201.00 224.00</td><td>How n MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 209.00 220.00 232.00 247.00</td><td>Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td>Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 226.8 243.0 226.8 243.0 259.0 275.0 291.6 307.8 324.0</td><td>Peak Pulse Current Jacob</td><td>Maxim Revet Leakage (µA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5</td></t<>	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGS PGV PGS PGS PGV PGS PGV PGS PGV PGS PHE PHR PHR PHR PHR PHT PHV PHW	Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGR DGR	Stand-Off Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.80 94.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00 178.00 189.00 201.00 224.00	How n MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 209.00 220.00 232.00 247.00	Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 226.8 243.0 226.8 243.0 259.0 275.0 291.6 307.8 324.0	Peak Pulse Current Jacob	Maxim Revet Leakage (µA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ45A SMDJ45A SMDJ51A SMDJ54A SMDJ56A SMDJ56A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ76A SMDJ76A SMDJ80A SMDJ70A SMDJ70A SMDJ100A SMDJ100A SMDJ110A SMDJ10A <td>BI SMDJ45CA SMDJ45CA SMDJ5CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ8CA SMDJ8CA SMDJ100CA SMDJ100CA <t< td=""><td>Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGS PGV PGS PGS PGV PGS PGV PGS PGV PGS PHE PHG PHR PHR PHR PHR PHT PHW PHX</td><td>Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DGX DGX DGX</td><td>Stand-Off Voltage Voltage A5.0 45.0 51.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0 220.0</td><td>Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 84.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00 178.00 189.00 201.00 224.00 224.00 224.00</td><td>How MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 209.00 220.00 232.00 247.00 272.00</td><td>Test Current (mA) 1</td><td>Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 226.8 243.0 226.8 243.0 259.0 275.0 291.6 307.8 324.0 356.0</td><td>Peak Pulse Current Jacob</td><td>Maxim Revet Leakag (µA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5</td></t<></td>	BI SMDJ45CA SMDJ45CA SMDJ5CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ76CA SMDJ76CA SMDJ76CA SMDJ8CA SMDJ8CA SMDJ100CA SMDJ100CA <t< td=""><td>Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGS PGV PGS PGS PGV PGS PGV PGS PGV PGS PHE PHG PHR PHR PHR PHR PHT PHW PHX</td><td>Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DGX DGX DGX</td><td>Stand-Off Voltage Voltage A5.0 45.0 51.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0 220.0</td><td>Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 84.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00 178.00 189.00 201.00 224.00 224.00 224.00</td><td>How MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 209.00 220.00 232.00 247.00 272.00</td><td>Test Current (mA) 1</td><td>Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 226.8 243.0 226.8 243.0 259.0 275.0 291.6 307.8 324.0 356.0</td><td>Peak Pulse Current Jacob</td><td>Maxim Revet Leakag (µA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5</td></t<>	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGS PGV PGS PGS PGV PGS PGV PGS PGV PGS PHE PHG PHR PHR PHR PHR PHT PHW PHX	Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DGX DGX DGX	Stand-Off Voltage Voltage A5.0 45.0 51.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0 220.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 84.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00 178.00 189.00 201.00 224.00 224.00 224.00	How MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 209.00 220.00 232.00 247.00 272.00	Test Current (mA) 1	Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 226.8 243.0 226.8 243.0 259.0 275.0 291.6 307.8 324.0 356.0	Peak Pulse Current Jacob	Maxim Revet Leakag (µA) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Uni SMDJ45A SMDJ48A SMDJ51A SMDJ54A SMDJ54A SMDJ50A SMDJ60A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A SMDJ100A	BI SMDJ45CA SMDJ45CA SMDJ45CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ75CA SMDJ75CA SMDJ76CA SMDJ8CA SMDJ10CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGS PGV PGX PGS PGV PGX PGS PGV PGS PGV PGS PHE PHG PHR PHR PHR PHR PHR PHT PHX PHX	Bi DFV DFX DFZ DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DHE DHK DHR DHR DHR DHR DHR DHR DHT DHV DHX DHX	Stand-Off Voltage Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 2200.0 220.0 250.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.80 94.40 100.00 111.00 122.00 133.00 144.00 155.00 167.00 178.00 155.00 167.00 178.00 201.00 224.00 224.00 229.00	MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 86.00 92.10 95.80 92.10 95.80 97.60 104.00 111.00 123.00 135.00 147.00 159.00 171.00 209.00 220.00 232.00 247.00 272.00 309.00	Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 226.8 243.0 226.8 243.0 2259.0 275.0 291.6 307.8 324.0 356.0 405.0	Peak Pulse Current Jacob	Maxim Rever Leakag @20wa 5
Uni SMDJ45A SMDJ45A SMDJ54A SMDJ54A SMDJ54A SMDJ50A SMDJ60A SMDJ70A SMDJ70A SMDJ70A SMDJ70A SMDJ100A	BI SMDJ45CA SMDJ45CA SMDJ45CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ75CA SMDJ75CA SMDJ8CA SMDJ8CA SMDJ100CA SMDJ100CA <t< td=""><td>Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGR PGR PGR</td><td>Bi DFV DFX DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DGX DGX DGY DHR DHR DHR DHR DHR DHR DHR DHR DHR DHR</td><td>Stand-Off Voltage Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0 220.0 220.0 250.0 300.0</td><td>Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 111.00 111.00 111.00 111.00 155.00 167.00 178.00 155.00 167.00 178.00 201.00 224.00 224.00 224.00 224.00 335.00</td><td>MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 92.10 95.80 92.10 95.80 92.10 104.00 111.00 123.00 135.00 147.00 159.00 171.00 220.00 220.00 222.00 247.00 272.00 399.00 371.00</td><td>Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td>Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 226.8 243.0 226.8 243.0 2259.0 2259.0 275.0 291.6 307.8 324.0 356.0 405.0 486.0</td><td>Peak Pulse Current Jacob</td><td>Maxim Rever Leakag @20wa 5</td></t<>	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGR PGR PGR	Bi DFV DFX DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DGX DGX DGY DHR DHR DHR DHR DHR DHR DHR DHR DHR DHR	Stand-Off Voltage Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0 220.0 220.0 250.0 300.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 111.00 111.00 111.00 111.00 155.00 167.00 178.00 155.00 167.00 178.00 201.00 224.00 224.00 224.00 224.00 335.00	MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 92.10 95.80 92.10 95.80 92.10 104.00 111.00 123.00 135.00 147.00 159.00 171.00 220.00 220.00 222.00 247.00 272.00 399.00 371.00	Test Current h (mA) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 226.8 243.0 226.8 243.0 2259.0 2259.0 275.0 291.6 307.8 324.0 356.0 405.0 486.0	Peak Pulse Current Jacob	Maxim Rever Leakag @20wa 5
Uni SMDJ45A SMDJ45A SMDJ45A SMDJ51A SMDJ54A SMDJ54A SMDJ54A SMDJ54A SMDJ64A SMDJ64A SMDJ64A SMDJ64A SMDJ64A SMDJ76A SMDJ76A SMDJ76A SMDJ76A SMDJ70A SMDJ70A SMDJ70A SMDJ100A SMDJ110A SMDJ110A SMDJ10A	BI SMDJ45CA SMDJ45CA SMDJ45CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ76CA SMDJ76CA SMDJ8CA SMDJ8CA SMDJ8CA SMDJ100CA	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGR PGR PGR	Bi DFV DFX DFZ DGE DGG DGK DGW DGR DGR DGV DGR DGV DGX DGX DGX DGV DGX DGV DGX DGV DGX DGV DGX DGV DHK DHR DHR DHR DHR DHR DHR DHV DHX DHZ DHZ DHZ	Stand-Off Voltage Voltage Voltage 45.0 45.0 61.0 54.0 58.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 180.0 190.0 200.0 220.0 220.0 250.0 300.0 350.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 111.00 111.00 111.00 1122.00 1133.00 1144.00 155.00 167.00 178.00 167.00 178.00 201.00 224.00 224.00 224.00 224.00 224.00 335.00 391.00	MAX 56:30 58:90 62:70 66:30 71:20 73:70 78:60 86:00 92:10 95:80 92:10 95:80 97:60 104:00 111:00 123:00 147:00 159:00 171:00 185:00 197:00 220:00 2247:00 309:00 371:00 432:00	Test Current (mA) 1	Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 226.8 243.0 226.8 243.0 226.8 243.0 259.0 275.0 291.6 307.8 324.0 356.0 405.0 486.0 567.0	Peak Pulse Current Jacob	Maxim Rever Leakag G 5
Uni SMDJ45A SMDJ45A SMDJ45A SMDJ51A SMDJ54A SMDJ56A SMDJ56A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ60A SMDJ70A SMDJ70A SMDJ70A SMDJ70A SMDJ70A SMDJ70A SMDJ100A SMDJ100A SMDJ110A SMDJ110A SMDJ20A	BI SMDJ45CA SMDJ45CA SMDJ45CA SMDJ5CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ6CA SMDJ75CA SMDJ75CA SMDJ8CA SMDJ8CA SMDJ100CA SMDJ100CA <t< td=""><td>Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGR PGR PGR</td><td>Bi DFV DFX DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DGX DGX DGY DHR DHR DHR DHR DHR DHR DHR DHR DHR DHR</td><td>Stand-Off Voltage Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0 220.0 220.0 250.0 300.0</td><td>Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 111.00 111.00 111.00 111.00 155.00 167.00 178.00 155.00 167.00 178.00 201.00 224.00 224.00 224.00 224.00 335.00</td><td>MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 92.10 95.80 92.10 95.80 92.10 104.00 111.00 123.00 135.00 147.00 159.00 171.00 220.00 220.00 222.00 247.00 272.00 399.00 371.00</td><td>Test Current (mA) 1</td><td>Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 226.8 243.0 226.8 243.0 2259.0 2259.0 275.0 291.6 307.8 324.0 356.0 405.0 486.0</td><td>Peak Pulse Current Jacob</td><td>Maximu Rever Rever Rever S</td></t<>	Uni PFV PFX PFZ RGE PGG PGK PGR PGR PGR PGR PGR PGR PGR PGR PGR PGR	Bi DFV DFX DGE DGG DGK DGR DGR DGR DGR DGR DGR DGR DGV DGX DGX DGX DGX DGX DGX DGX DGX DGX DGY DHR DHR DHR DHR DHR DHR DHR DHR DHR DHR	Stand-Off Voltage Voltage Voltage 45.0 45.0 61.0 54.0 68.0 60.0 64.0 70.0 75.0 78.0 80.0 85.0 90.0 100.0 110.0 120.0 130.0 140.0 150.0 160.0 170.0 180.0 190.0 200.0 220.0 220.0 250.0 300.0	Voltage MIN 50.00 53.30 56.70 60.00 64.40 68.70 71.10 77.80 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 83.30 86.70 111.00 111.00 111.00 111.00 155.00 167.00 178.00 155.00 167.00 178.00 201.00 224.00 224.00 224.00 224.00 335.00	MAX 55.30 58.90 62.70 66.30 71.20 73.70 78.60 92.10 95.80 92.10 95.80 92.10 104.00 111.00 123.00 135.00 147.00 159.00 171.00 220.00 220.00 222.00 247.00 272.00 399.00 371.00	Test Current (mA) 1	Champing Voltage Ve (2):=v) 72.7 77.4 82.4 87.1 93.6 96.8 103.0 113.0 121.0 126.0 129.6 137.0 126.0 129.6 137.0 129.6 137.0 129.6 137.0 129.6 137.0 226.8 243.0 226.8 243.0 2259.0 2259.0 275.0 291.6 307.8 324.0 356.0 405.0 486.0	Peak Pulse Current Jacob	Maximu Rever Rever Rever S

Note: 1. Suffix "A denotes 5% tolerance device. 2. Add suffix "CA" after part number to specify Bi-directional devices. 3. For Bi-Directional devices having V₁ of 10 volts and under, the I₁₁ limit is double.





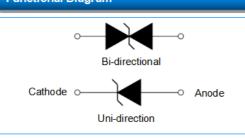




Applications

TVS devices are ideal for the protection of I/O interfaces, V_{CC} bus and other vulnerable circuits used in Telecom, Computer, Industrial and Consumer electronic applications.

Functional Diagram



Parameter	Symbol	Value	Unit
Parameter	Symbol	value	Unit
Peak Pulse Power Dissipation with a 10/1000µs waveform (Fig. 1)(Note 1), (Note 2)	Рерм	3000	Watts
Peak Pulse Current with a 10/1000µs waveform.(Note1,Fig.3)	IPP	See Next Table	Amps
Power Dissipation on Infinite Heat Sink at TL=75°C	P _{M(AV)}	6.0	Watt
Peak Forward Surge Current, 8.3ms Single Half Sine Wave (Note 3)	IFSM	300	Amps
Maximum Instantaneous Forward Voltage at 25A for Unidirectional Only (Note 4)	VF	3.5/5.0	Voltage
Operating junction and Storage Temperature Range.	TJ, TSTG	-55 to +150	C

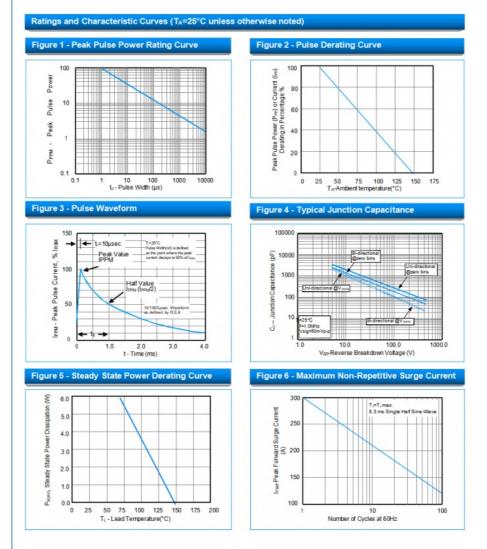
Notes:

1. Non-repetitive current pulse, per Fig. 3 and derated above $T_{\rm A}$ = 25°C $\,$ per Fig.2.

2. Mounted on 5.0mm x 5.0mm (0.03mmthick) Copper Pads to each terminal.

3. 8.3ms single half sine-wave, or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.

4. V_F < 3.5V for V_{BR} < 200V and V_F < 6.5V for V_{BR} > 201V.



I-V Curve Characteristics

Physical Specifications

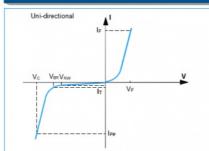
Soldering Parameters

Weight

Case

Polarity

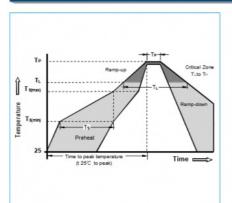
Terminal



Bi-directional	IPP	1
Vc VarVrw	IT IR IT IR	V VRW VBR Vc
/	Ipp	

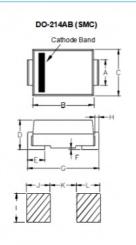
Environmental Specifications

0.007 ounce, 0.21 gram	Temperature Cycle	JESD22-A104
JEDEC DO-214AB Molded Plastic over	Pressure Cooker	JESD22-A102
glass passivated junction Color band denotes cathode except	High Temp. Storage	JESD22-A103
Bipolar Matte Tip plated leads Soldership per	HTRB	JESD22-A108
Matte Tin-plated leads, Solderable per JESD22-B102D	Thermal Shock	JESD22-A106



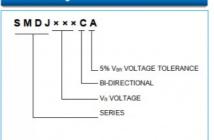
Reflow Co	ndition	Lead-free assembly	
	-Temperature Min (Ts(min))	150°C	
Pre Heat	-Temperature Max (Ts(max))	200°C	
	- Time (min to max) (Ts)	60 -180 Seconds	
Average ra to peak	amp up rate (Liquidus Temp T _L)	3°C/second max	
T _{S(max)} to T	L - Ramp-up Rate	3°C/second max	
Reflow	- Temperature (TL) (Liquidus)	217°C	
Reflow	- Time (min to max) (TL)	60 -150 Seconds	
Peak Tem	perature (T _P)	260 +0/-5°C	
Time wit Temperatu	thin 5°C of actual peak mre(t _p)	20 -40 Seconds	
Ramp-dow	n Rate	6°C/second max	
Time 25°C	to peak Temperature (TP)	8 minutes Max	
Do not exc	eed	280°C	

Dimensions



Dimensions	Inc	hes	Millimeters		
Dimensions	Min	Max	Min	Max	
Α	0.108	0.126	2.750	3.200	
в	0.260	0.280	6.520	7.110	
с	0.217	0.244	5.520	6.220	
D	0.080	0.112	2.050	2.850	
E	0.030	0.060	0.750	1.520	
F	-	0.008	•	0.203	
G	0.305	0.320	7.640	8.130	
н	0.006	0.012	0.150	0.310	
1	0.121	-	3.070	-	
J	0.068	-	1.715	-	
к	-	0.185	-	4.690	
L	0.068	-	1.715	-	

Part Numbering



Part Marking

