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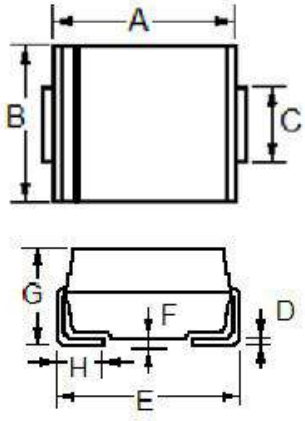
SMA6J5.0--SMA6J200CA
600W Suface Mount TVS Diode



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	3.99	4.50	0.157	0.177
B	2.54	2.79	0.100	0.110
C	1.25	1.65	0.049	0.065
D	0.152	0.305	0.006	0.012
E	4.93	5.28	0.194	0.208
F	----	0.203	----	0.008
G	1.98	2.29	0.078	0.090
H	0.76	1.52	0.030	0.060

Maximum Ratings And Thermal Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

Parameter	Symbol	Value	Units
Peak Power Dissipation (Note 1.) @T_L = 25°C, Pulse Width = 1 ms	P_{PK}	600	W
Forward Surge Current (Note 2.) @T_A = 25°C	I_{FSM}	100	A
Power Dissipation On Infinite Heatsink, @T_A= 50°C	$P_{M(AV)}$	5.0	W
Thermal Resistance Junction To Ambient Air (Note 3.)	$R_{\theta JA}$	100	°C/W
Thermal Resistance Junction To Leads	$R_{\theta JL}$	20	°C/W
Operating & Storage Temperature Range	T_{STG}	-55 to 150	°C
Operating Junction Temperature Range	T_J	-55 to 150	°C

1） 10 X 1000 us, non–repetitive

2）1/2 sine wave (or equivalent square wave), PW = 8.3 ms, duty cycle = 4 pulses per minute maximum

3）Mounted on minimum recommended pad layout

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Electrical Characteristics Ratings at 25℃ ambient temperature unless otherwise specified).

Part Number	Part Number	Device Marking Code		Reverse Stand off Voltage VR (Volts)	Breakdown Voltage VBR (Volts) @ IT		Test Current IT (mA)	Maximum Clamping Voltage VC @ IPP (Volts)	Maximum Peak Pulse Current IPP (A)	Maximum Reverse Leakage IR @ VR (μA)
UNI	BI	UNI	BI		MIN	MAX				
SMA6J5.0A	SMA6J5.0CA	HEG	TEG	5.00	6.40	7.00	10	9.2	65.2	500
SMA6J6.0A	SMA6J6.0CA	HGG	TGG	6.00	6.67	7.37	10	10.3	58.3	500
SMA6J6.5A	SMA6J6.5CA	HKG	TKG	6.50	7.22	7.98	10	11.2	53.6	200
SMA6J7.0A	SMA6J7.0CA	HMG	TMG	7.00	7.78	8.60	10	12.0	50.0	200
SMA6J7.5A	SMA6J7.5CA	HPG	TPG	7.50	8.33	9.21	1	12.9	46.6	100
SMA6J8.0A	SMA6J8.0CA	HRG	TRG	8.00	8.89	9.83	1	13.6	44.2	50
SMA6J8.5A	SMA6J8.5CA	HTG	TTG	8.50	9.44	10.40	1	14.4	41.7	50
SMA6J9.0A	SMA6J9.0CA	HVG	TVG	9.00	10.00	11.10	1	15.4	39.0	10
SMA6J10A	SMA6J10CA	HXG	TXG	10.50	11.10	12.30	1	17.0	35.3	10
SMA6J11A	SMA6J11CA	HZG	TZG	11.55	12.20	13.50	1	18.2	33.0	10
SMA6J12A	SMA6J12CA	IEG	UEG	12.60	13.30	14.70	1	19.9	30.2	10
SMA6J13A	SMA6J13CA	IGG	UGG	13.65	14.40	15.90	1	21.5	28.0	10
SMA6J14A	SMA6J14CA	IKG	UKG	14.70	15.60	17.20	1	23.2	25.9	10
SMA6J15A	SMA6J15CA	IMG	UMG	15.75	16.70	18.50	1	24.4	24.6	10
SMA6J16A	SMA6J16CA	IPG	UPG	16.80	17.80	19.70	1	26.0	23.1	10
SMA6J17A	SMA6J17CA	IRG	URG	17.85	18.90	20.90	1	27.6	21.8	10
SMA6J18A	SMA6J18CA	ITG	UTG	18.90	20.00	22.10	1	29.2	20.6	10
SMA6J20A	SMA6J20CA	IVG	UVG	21.00	22.20	24.50	1	32.4	18.6	10
SMA6J22A	SMA6J22CA	IXG	UXG	23.10	24.40	26.90	1	35.5	16.9	10
SMA6J24A	SMA6J24CA	IZG	UZG	25.20	26.70	29.50	1	38.9	15.5	5
SMA6J26A	SMA6J26CA	JEG	VEG	27.30	28.90	31.90	1	42.1	14.3	5
SMA6J28A	SMA6J28CA	JGG	VGG	29.40	31.10	34.40	1	45.4	13.3	5
SMA6J30A	SMA6J30CA	JKG	VKG	31.50	33.30	36.80	1	48.4	12.4	5
SMA6J33A	SMA6J33CA	JMG	VMG	34.65	36.70	40.60	1	53.3	11.3	5
SMA6J36A	SMA6J36CA	JPG	VPG	37.80	40.00	44.20	1	58.1	10.4	5
SMA6J40A	SMA6J40CA	JRG	VRG	42.00	44.40	49.10	1	64.5	9.3	5
SMA6J43A	SMA6J43CA	JTG	VTG	45.15	47.80	52.80	1	69.4	8.7	5

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SMA6J45A	SMA6J45CA	JVG	VVG	47.25	50.00	55.30	1	72.7	8.3	5
SMA6J48A	SMA6J48CA	JXG	VXG	50.40	53.30	58.90	1	77.4	7.8	5
SMA6J51A	SMA6J51CA	JZG	VZG	53.55	56.70	62.70	1	82.4	7.3	5
SMA6J54A	SMA6J54CA	REG	WEG	56.70	60.00	66.30	1	87.1	6.9	5
SMA6J58A	SMA6J58CA	RGG	WGG	60.90	64.40	71.20	1	93.6	6.5	5
SMA6J60A	SMA6J60CA	RKG	WKG	63.00	66.70	73.70	1	96.8	6.2	5
SMA6J64A	SMA6J64CA	RMG	WMG	67.20	71.10	78.60	1	103.0	5.9	5
SMA6J70A	SMA6J70CA	RPG	WPG	73.50	77.80	86.00	1	113.0	5.3	5
SMA6J75A	SMA6J75CA	RRG	WRG	78.75	83.30	92.10	1	121.0	5.0	5
SMA6J78A	SMA6J78CA	RTG	WTG	81.90	86.70	95.80	1	126.0	4.8	5
SMA6J85A	SMA6J85CA	RVG	WVG	89.25	94.40	104.00	1	137.0	4.4	5
SMA6J90A	SMA6J90CA	RXG	WXG	94.50	100.00	111.00	1	146.0	4.1	5
SMA6J100A	SMA6J100CA	RZG	WZG	105.00	111.00	123.00	1	162.0	3.7	5
SMA6J110A	SMA6J110CA	SEG	XEG	115.50	122.00	135.00	1	177.0	3.4	5
SMA6J120A	SMA6J120CA	SGG	XGG	126.00	133.00	147.00	1	193.0	3.1	5
SMA6J130A	SMA6J130CA	SKG	XKG	136.50	144.00	159.00	1	209.0	2.9	5
SMA6J150A	SMA6J150CA	SMG	XMG	157.50	167.00	185.00	1	243.0	2.5	5
SMA6J160A	SMA6J160CA	SPG	XPG	168.00	178.00	197.00	1	259.0	2.3	5
SMA6J170A	SMA6J170CA	SRG	XRG	178.50	189.00	209.00	1	275.0	2.2	5
SMA6J180A	SMA6J180CA	STG	XTG	189.00	201.00	222.00	1	292.0	2.1	5
SMA6J190A	SMA6J190CA	SVG	XVG	199.50	211.00	233.00	1	306.0	2.0	5
SMA6J200A	SMA6J200CA	SXG	XXG	210.00	224.00	247.00	1	324.0	1.9	5

Gor Bi-directional type having VRWM oG 10 Volts and less, the IR limit is double

1. A transient suppressor is normally selected according to the working peak reverse voltage (VRWM), which should be equal to or greater thanthe DC or continuous peak operating voltage level.
2. VBR measured at pulse test current IT at an ambient temperature oG 25°C.
3. Surge current waveGorm per Gigure 1 and derate per Gigure

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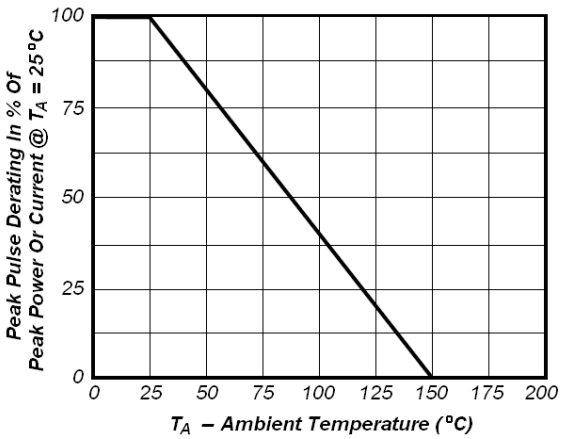
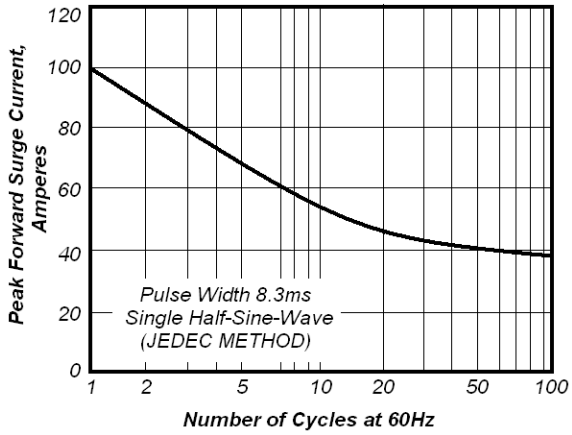
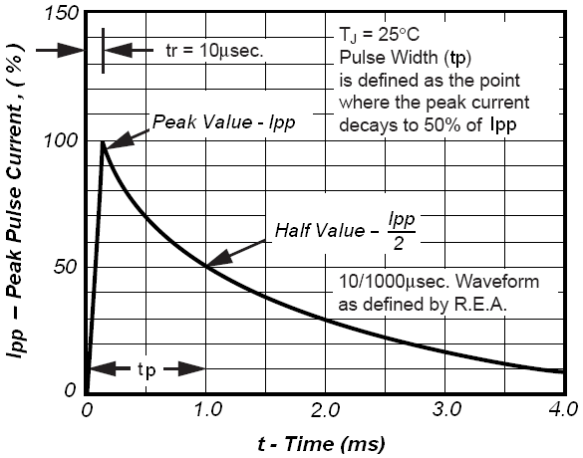
3. Typical Characteristics



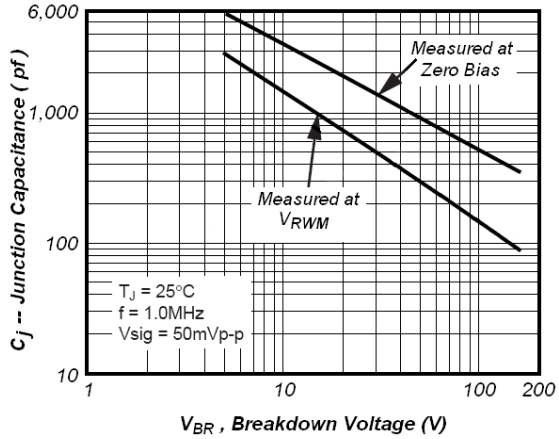
Gig1. Pulse Dearting Curve



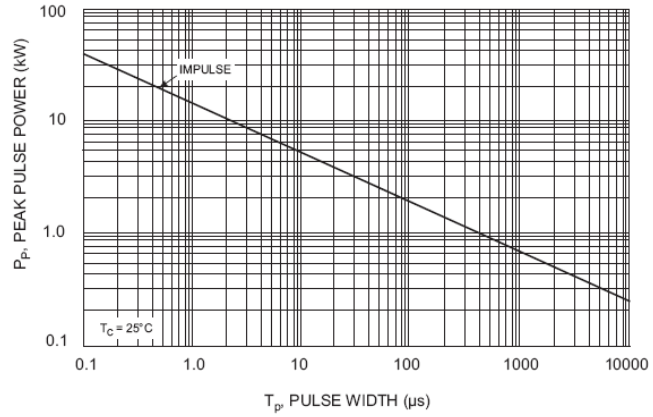
Gig2. Maximum Non-Repetitive Peak Gorward Surge Current



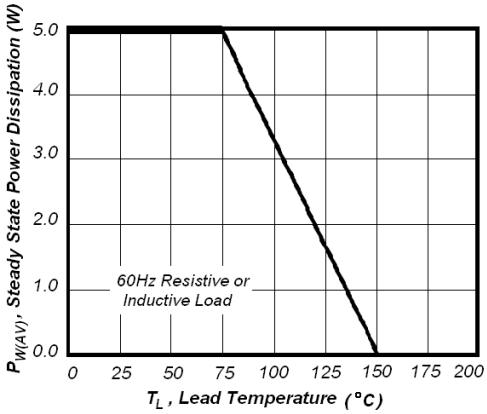
Gig3. Pulse WaveGorm



Gig4. Typical Junction Capacitance



Gig5. Peak Pulse Power Rating curve



Gig6. Steady State Power Derating Curv