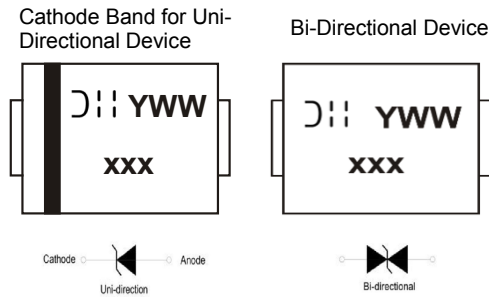


Marking Information



xx = Product Type Marking Code
(See Electrical Characteristics Table)
DII = Manufacturers' Marking
YWW = Date Code Marking
Y = Last Digit of Year (ex: 1 for 2021)
WW = Week Code (01 to 53)

Maximum Ratings (@ $T_A = +25^\circ\text{C}$, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation (Non-Repetitive Current Pulse Derated Above $T_A = +25^\circ\text{C}$) (Note 6)	P_{PK}	400	W
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load (Notes 6, 7, 8)	I_{FSM}	40	A
Steady State Power Dissipation @ $T_L = +75^\circ\text{C}$	$PM_{(AV)}$	1.0	W
Instantaneous Forward Voltage @ $I_{PP} = 35\text{A}$ (Notes 6, 7, 8)	V_F	3.5	V

Notes: 6. Valid provided that terminals are kept at ambient temperature.
7. Measured with 8.3ms single half sine-wave. Duty cycle = 4 pulses per minute maximum.
8. Unidirectional units only.

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +175	$^\circ\text{C}$

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Part Number Add C For Bidirectional (Note 9)	Reverse Standoff Voltage	Breakdown Voltage V _{BR} @ I _T (Note 10)		Test Current	Max. Reverse Leakage @ V _{RWM} (Note 12)	Max. Clamping Voltage @ I _{PP} (Note 11)	Max. Peak Pulse Current	Marking Code	
	V _{RWM} (V)	Min (V)	Max (V)	I _T (mA)	I _R (μA)	V _C (V)	I _{PP} (A)	BI-	UNI-
SMAJ5.0(C)AQ	5.0	6.40	7.25	10	800	9.2	43.5	TE	HE
SMAJ7.5(C)AQ	7.5	8.33	9.21	1.0	100	12.9	31.0	TP	HP
SMAJ8.5(C)AQ	8.5	9.44	10.4	1.0	10	14.4	27.7	TT	HT
SMAJ10(C)AQ	10	11.1	12.3	1.0	5.0	17.0	23.5	TX	HX
SMAJ12(C)AQ	12	13.3	14.7	1.0	5.0	19.9	20.1	UE	IE
SMAJ13(C)AQ	13	14.4	15.9	1.0	5.0	21.5	18.6	UG	IG
SMAJ14(C)AQ	14	15.6	17.2	1.0	5.0	23.2	17.2	UK	IK
SMAJ15(C)AQ	15	16.7	18.5	1.0	5.0	24.4	16.4	UM	IM
SMAJ16(C)AQ	16	17.8	19.7	1.0	5.0	26.0	15.3	UP	IP
SMAJ17(C)AQ	17	18.9	20.9	1.0	5.0	27.6	14.5	UR	IR
SMAJ18(C)AQ	18	20.0	22.1	1.0	5.0	29.2	13.7	UT	IT
SMAJ20(C)AQ	20	22.2	24.5	1.0	5.0	32.4	12.3	UV	IV
SMAJ22(C)AQ	22	24.4	26.9	1.0	5.0	35.5	11.2	UX	IX
SMAJ24(C)AQ	24	26.7	29.5	1.0	5.0	38.9	10.3	UZ	IZ
SMAJ26(C)AQ	26	28.9	31.9	1.0	5.0	42.1	9.5	VE	JE
SMAJ28(C)AQ	28	31.1	34.4	1.0	5.0	45.4	8.8	VG	JG
SMAJ30(C)AQ	30	33.3	36.8	1.0	5.0	48.4	8.3	VK	JK
SMAJ33(C)AQ	33	36.7	40.6	1.0	5.0	53.3	7.5	VM	JM
SMAJ36(C)AQ	36	40.0	44.2	1.0	5.0	58.1	6.9	VP	JP
SMAJ40(C)AQ	40	44.4	49.1	1.0	5.0	64.5	6.2	VR	JR
SMAJ43(C)AQ	43	47.8	52.8	1.0	5.0	69.4	5.7	VT	JT
SMAJ48(C)AQ	48	53.3	58.9	1.0	5.0	77.4	5.2	VX	JX
SMAJ51(C)AQ	51	56.7	62.7	1.0	5.0	82.4	4.9	VZ	JZ
SMAJ58(C)AQ	58	64.4	71.2	1.0	5.0	93.6	4.3	WG	RG
SMAJ60(C)AQ	60	66.7	73.7	1.0	5.0	96.8	4.1	WK	RK
SMAJ70(C)AQ	70	77.8	86.0	1.0	5.0	113	3.5	WP	RP
SMAJ78(C)AQ	78	86.7	95.8	1.0	5.0	126	3.2	WT	RT
SMAJ100(C)AQ	100	111	123	1.0	5.0	162	2.5	WZ	RZ
SMAJ170(C)AQ	170	189	209	1.0	5.0	275	1.4	XR	SR
SMAJ200(C)AQ	200	224	248	1.0	1.0	324	1.2	YT	ST

Notes:

9. Suffix C denotes bidirectional device.
10. V_{BR} measured with I_T current pulse = 10ms to 15ms.
11. Per 10 × 1000μs waveform. See Figure 4.
12. For bidirectional devices having V_{RWM} of 10V and under, the I_R is doubled.

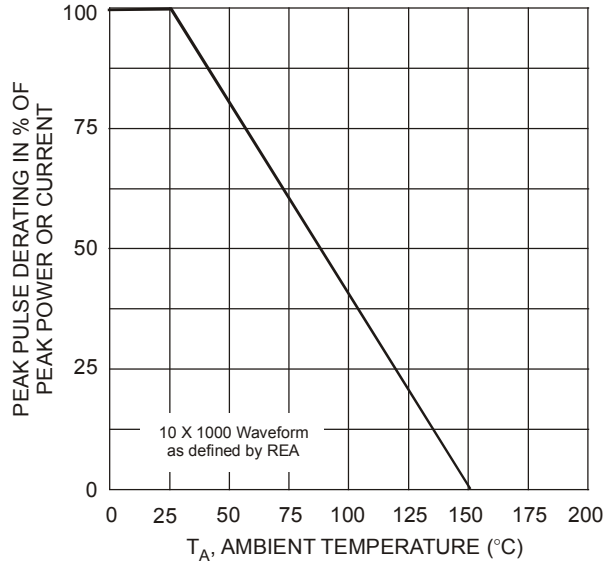


Fig. 1 Pulse Derating Curve

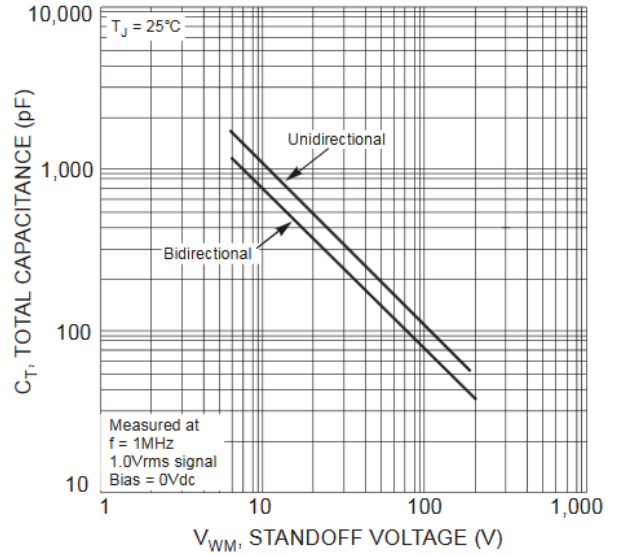


Fig. 2 Typical Total Capacitance

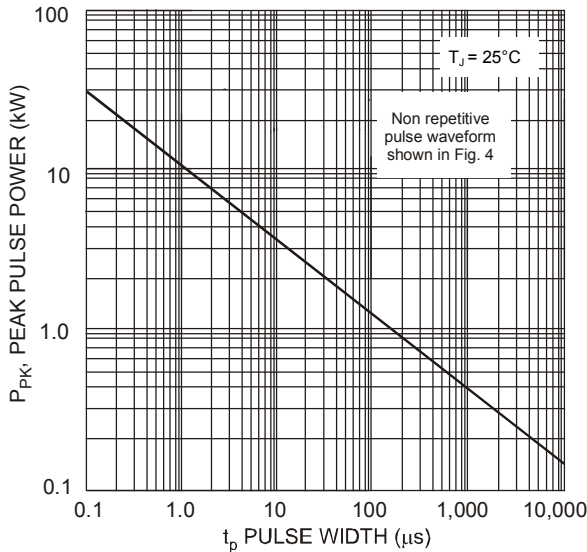


Fig. 3 Pulse Rating Curve

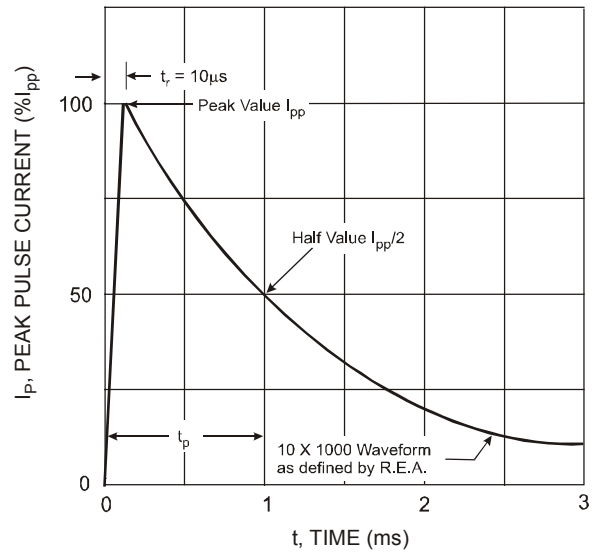


Fig. 4 Pulse Waveform

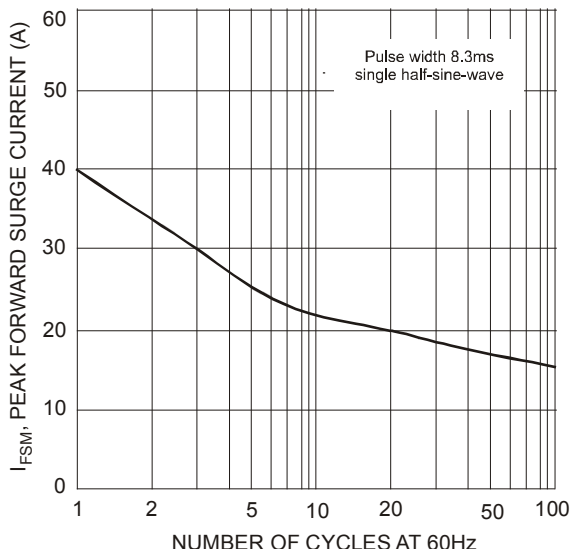


Fig. 5 Maximum Non-Repetitive Surge Current

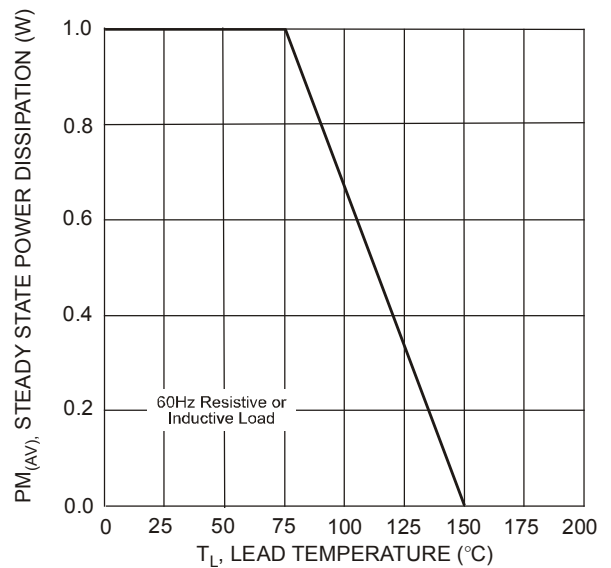
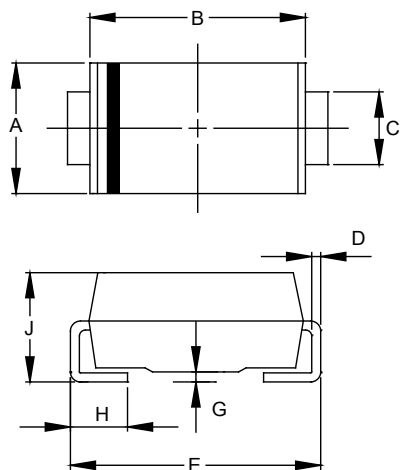


Fig. 6 Steady State Power Derating Curve

Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMA

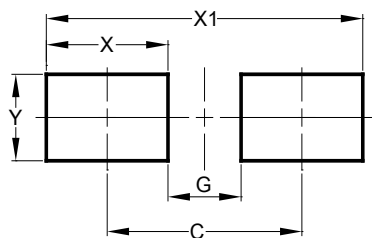


SMA		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.05	0.20
H	0.76	1.52
J	1.96	2.40
All Dimensions in mm		

Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMA



Dimensions	Value (in mm)
C	4.00
G	1.50
X	2.50
X1	6.50
Y	1.70

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