MAXIMUM RATINGS (T_A = 25 °C unless otherwise noted)				
PARAMETER	**SYMBOL**	**SMAJ530**	**SMAJ550**	**UNIT**
Device marking code		HD	SB	
Peak pulse power dissipation (1)(2)(4) (fig. 1)	P_{PPM}	300		W
Power dissipation on infinite heatsink (3)	P_D	2.5		W
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to 150		°C

Notes

(1) Non-repetitive current pulse, per fig. 3 and derated above 25 °C per fig. 2.
(2) Mounted on 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pads to each terminal
(3) Lead temperature at T_L = 75 °C
(4) Peak pulse power waveform is 10/1000 µs

ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)			
DEVICE TYPE	**BREAKDOWN VOLTAGE V_{BR} AT I_T (V)**	**TEST CURRENT I_T (µA)**	**STAND-OFF VOLTAGE V_{WM} (V)**
	MIN.		
SMAJ530	530	100	477
SMAJ550	550	100	495

ADDITIONAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)					
PARAMETER	**TEST CONDITIONS**	**SYMBOL**	**SMAJ530**	**SMAJ550**	**UNIT**
Max. clamping voltage	400 mA, 10/1000 µs waveform	V_C	760		V
Maximum DC reverse leakage current	V_{WM}	I_D	1.0		µA
Typical temperature coefficient	of V_{BR}		650		mV/°C
Typical capacitance (1)	0 V	C_J	90		pF
	200 V		7.5		

Note

(1) Measured at 1 MHz

THERMAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)				
PARAMETER	**SYMBOL**	**SMAJ530**	**SMAJ550**	**UNIT**
Typical thermal resistance, junction to lead	$R_{\theta JL}$	30		°C/ W
Typical thermal resistance, junction to ambient (1)	$R_{\theta JA}$	120		

Note

(1) Mounted on minimum recommended pad layout

ORDERING INFORMATION (Example)				
PREFERRED P/N	**UNIT WEIGHT (g)**	**PREFERRED PACKAGE CODE**	**BASE QUANTITY**	**DELIVERY MODE**
SMAJ530-E3/61	0.064	61	1800	7" diameter plastic tape and reel
SMAJ530-E3/5A	0.064	5A	7500	13" diameter plastic tape and reel
SMAJ530HE3/61 (1)	0.064	61	1800	7" diameter plastic tape and reel
SMAJ530HE3/5A (1)	0.064	5A	7500	13" diameter plastic tape and reel
SMAJ530HE3_A/H (1)	0.064	H	1800	7" diameter plastic tape and reel
SMAJ530HE3_A/I (1)	0.064	I	7500	13" diameter plastic tape and reel

Note

(1) AEC-Q101 qualified

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

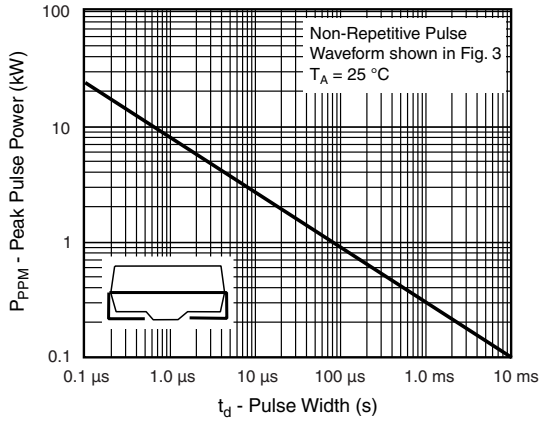


Fig. 1 - Peak Pulse Power Rating Curve

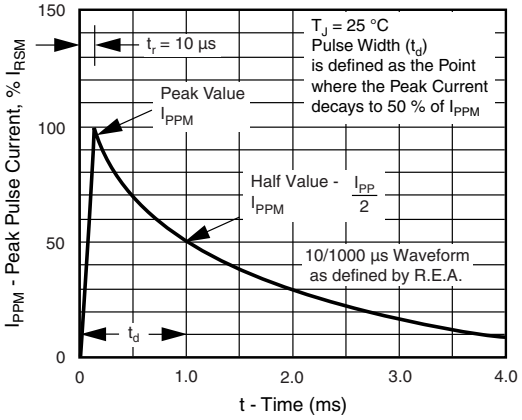


Fig. 3 - Pulse Waveform

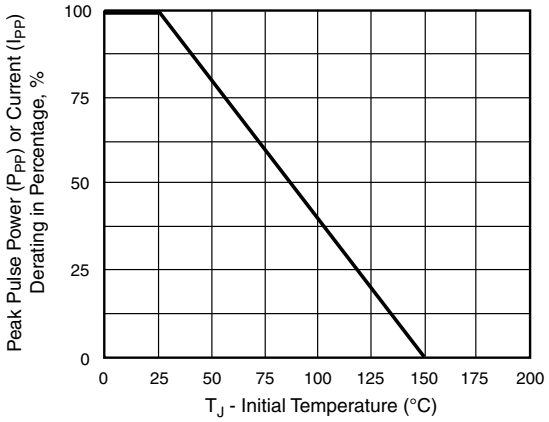
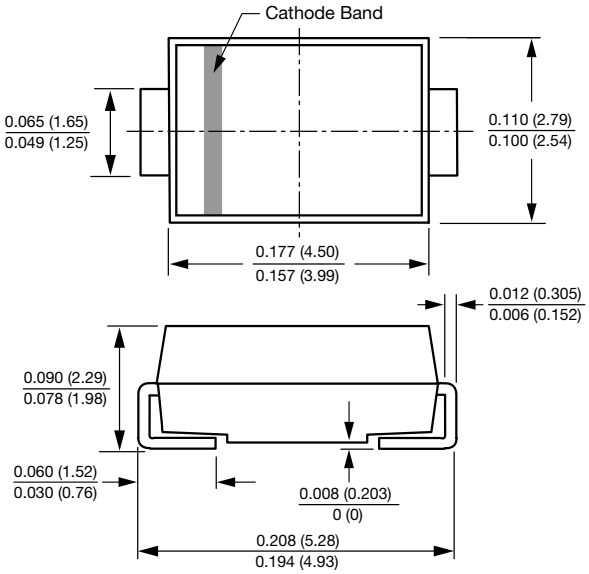


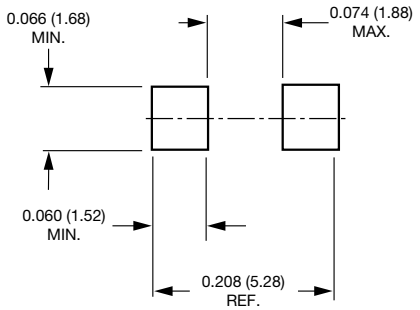
Fig. 2 - Pulse Power or Current vs. Initial Junction Temperature

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

DO-214AC (SMA)



Mounting Pad Layout



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