

**ELECTRICAL CHARACTERISTICS** ( $T_C = 25^\circ\text{C}$  unless otherwise noted)

DEVICE TYPE	BREAKDOWN VOLTAGE $V_{BR}$ (V)		TEST CURRENT $I_T$ (mA)	STAND-OFF VOLTAGE $V_{WM}$ (V)	MAXIMUM REVERSE LEAKAGE AT $V_{WM}$ $I_D$ ( $\mu\text{A}$ )	MAXIMUM REVERSE LEAKAGE AT $V_{WM}$ $T_J = 175^\circ\text{C}$ $I_D$ ( $\mu\text{A}$ )	MAX. PEAK PULSE CURRENT AT 10/1000 $\mu\text{s}$ WAVEFORM (A)	MAXIMUM CLAMPING VOLTAGE AT $I_{PPM}$ $V_C$ (V)
	MIN.	MAX.						
SM6S10A	11.1	12.3	5.0	10.0	15	250	271	17.0
SM6S11A	12.2	13.5	5.0	11.0	10	150	253	18.2
SM6S12A	13.3	14.7	5.0	12.0	10	150	231	19.9
SM6S13A	14.4	15.9	5.0	13.0	10	150	214	21.5
SM6S14A	15.6	17.2	5.0	14.0	10	150	198	23.2
SM6S15A	16.7	18.5	5.0	15.0	10	150	189	24.4
SM6S16A	17.8	19.7	5.0	16.0	10	150	177	26.0
SM6S17A	18.9	20.9	5.0	17.0	10	150	167	27.6
SM6S18A	20.0	22.1	5.0	18.0	10	150	158	29.2
SM6S20A	22.2	24.5	5.0	20.0	10	150	142	32.4
SM6S22A	24.4	26.9	5.0	22.0	10	150	130	35.5
SM6S24A	26.7	29.5	5.0	24.0	10	150	118	38.9
SM6S26A	28.9	31.9	5.0	26.0	10	150	109	42.1
SM6S28A	31.1	34.4	5.0	28.0	10	150	101	45.4
SM6S30A	33.3	36.8	5.0	30.0	10	150	95	48.4
SM6S33A	36.7	40.6	5.0	33.0	10	150	86	53.3
SM6S36A	40.0	44.2	5.0	36.0	10	150	79	58.1

**Note**

- For all types maximum  $V_F = 1.9\text{ V}$  at  $I_F = 100\text{ A}$  measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

**THERMAL CHARACTERISTICS** ( $T_C = 25^\circ\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Typical thermal resistance, junction to case	$R_{\theta JC}$	0.95	$^\circ\text{C/W}$

**ORDERING INFORMATION** (Example)

PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
SM6S10AHE3_A/I <sup>(1)</sup>	2.550	I	750	13" diameter plastic tape and reel, anode towards the sprocket hole

**Note**

- <sup>(1)</sup> AEC-Q101 qualified



## RATINGS AND CHARACTERISTICS CURVES ( $T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

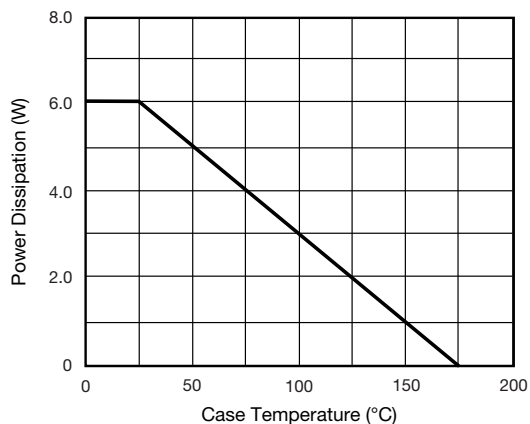


Fig. 1 - Power Derating Curve

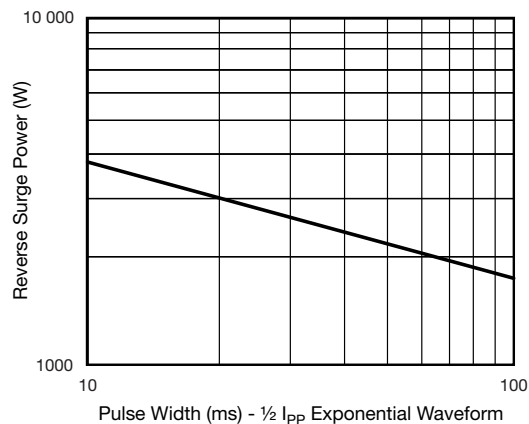


Fig. 4 - Reverse Power Capability

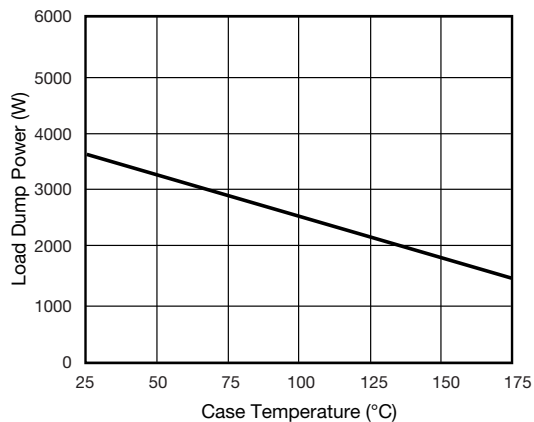


Fig. 2 - Load Dump Power Characteristics (10 ms Exponential Waveform)

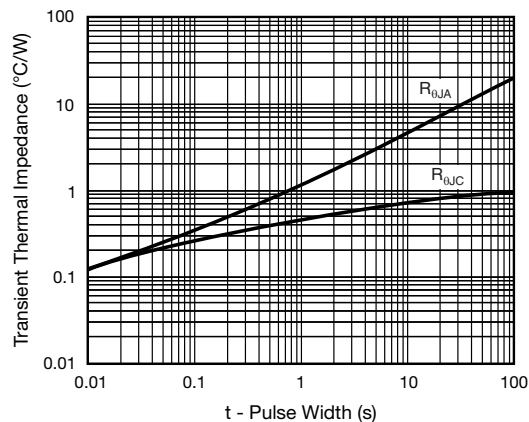


Fig. 5 - Typical Transient Thermal Impedance

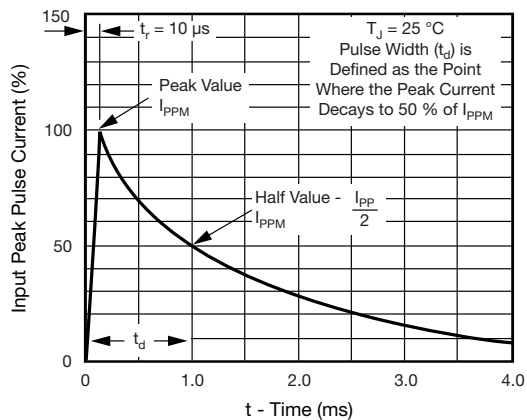
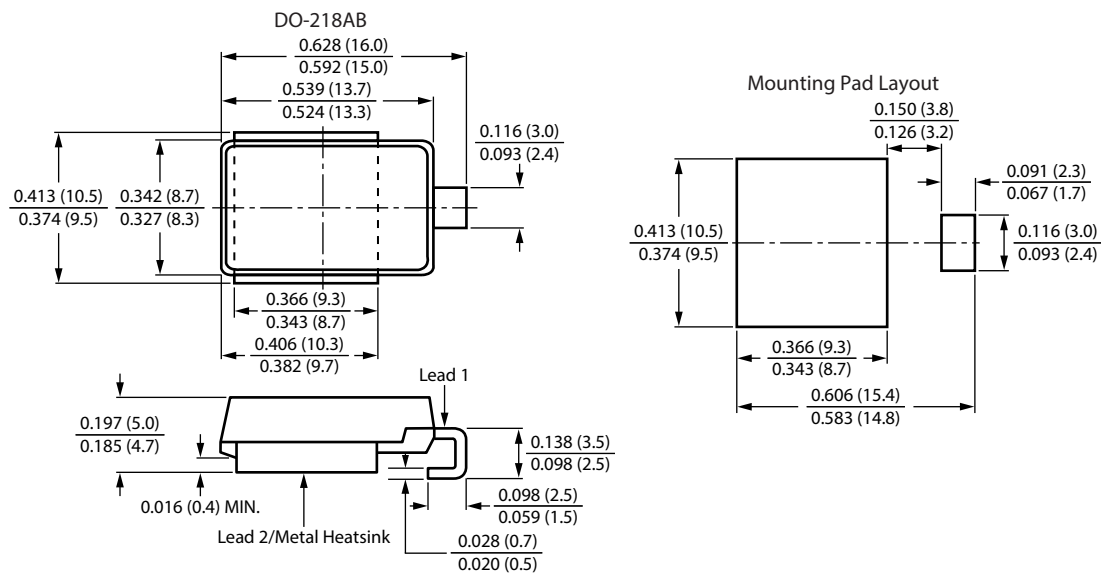


Fig. 3 - Pulse Waveform



## PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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