ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)											
DEVICE TYPE	DEVICE MARKING CODE	BREAKDOWN VOLTAGE V_{BR} (1) AT I_T (V)			TEST CURRENT I_T (mA)	STAND-OFF VOLTAGE V_{WM} (V)	MAXIMUM REVERSE LEAKAGE AT V_{WM} I_R (µA)	T_J = 150 °C MAXIMUM REVERSE LEAKAGE AT V_{WM} I_D (µA)	MAXIMUM PEAK PULSE SURGE CURRENT I_{PPM} (2) (A)	MAXIMUM CLAMPING VOLTAGE AT I_{PPM} V_C (V)	TYPICAL TEMP. COEFFICIENT OF V_{BR} (3) αT (%/°C)
		MIN.	NOM.	MAX.							
TPSMA6.8A	AEP	6.45	6.80	7.14	10	5.80	300	1000	38.1	10.5	0.047
TPSMA7.5A	AGP	7.13	7.50	7.88	10	6.40	150	500	35.4	11.3	0.052
TPSMA8.2A	AKP	7.79	8.20	8.61	10	7.02	50	200	33.1	12.1	0.056
TPSMA9.1A	AMP	8.65	9.10	9.55	1.0	7.78	10	50	29.9	13.0	0.060
TPSMA10A	APP	9.50	10.0	10.50	1.0	8.65	5.0	20	27.6	14.5	0.064
TPSMA11A	ARP	10.50	11.0	11.60	1.0	9.40	1.0	5.0	25.6	15.6	0.067
TPSMA12A	ATP	11.40	12.0	12.60	1.0	10.20	1.0	5.0	24.0	16.7	0.070
TPSMA13A	AVP	12.40	13.0	13.70	1.0	11.10	1.0	5.0	22.0	18.2	0.072
TPSMA15A	AXP	14.30	15.0	15.80	1.0	12.80	1.0	5.0	18.9	21.2	0.076
TPSMA16A	AZP	15.20	16.0	16.80	1.0	13.60	1.0	5.0	17.8	22.0	0.078
TPSMA18A	BEP	17.10	18.0	18.90	1.0	15.30	1.0	5.0	15.9	25.5	0.080
TPSMA20A	BGP	19.00	20.0	21.00	1.0	17.10	1.0	5.0	14.4	27.7	0.082
TPSMA22A	BKP	20.90	22.0	23.10	1.0	18.80	1.0	5.0	13.1	30.6	0.084
TPSMA24A	BMP	22.80	24.0	25.20	1.0	20.50	1.0	5.0	12.0	33.2	0.085
TPSMA27A	BPP	25.70	27.0	28.40	1.0	23.10	1.0	5.0	10.7	37.5	0.087
TPSMA30A	BRP	28.50	30.0	31.50	1.0	25.60	1.0	5.0	9.7	41.4	0.088
TPSMA33A	BTP	31.40	33.0	34.70	1.0	28.20	1.0	5.0	8.8	45.7	0.089
TPSMA36A	BVP	34.20	36.0	37.80	1.0	30.80	1.0	5.0	8.0	49.9	0.090
TPSMA39A	BXP	37.10	39.0	41.00	1.0	33.30	1.0	5.0	7.4	53.9	0.091
TPSMA43A	BZP	40.90	43.0	45.20	1.0	36.80	1.0	5.0	6.7	59.3	0.092

Notes

(1) V_{BR} measured after I_T applied for 300 µs, I_T = square wave pulse or equivalent
(2) Surge current waveform per fig. 3 and derated per fig. 2
(3) To calculate V_{BR} vs. junction temperature, use the following formula: V_{BR} at T_J = V_{BR} at 25 °C x (1 + αT x (T_J - 25))
(4) All terms and symbols are consistent with ANSI/IEEE C62.35

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TPSMA6.8AHE3_B/H (1)	0.064	H	1800	7" diameter plastic tape and reel
TPSMA6.8AHE3_B/I (1)	0.064	I	7500	13" diameter plastic tape and reel
TPSMA6.8AHM3_B/H (1)	0.064	H	1800	7" diameter plastic tape and reel
TPSMA6.8AHM3_B/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)

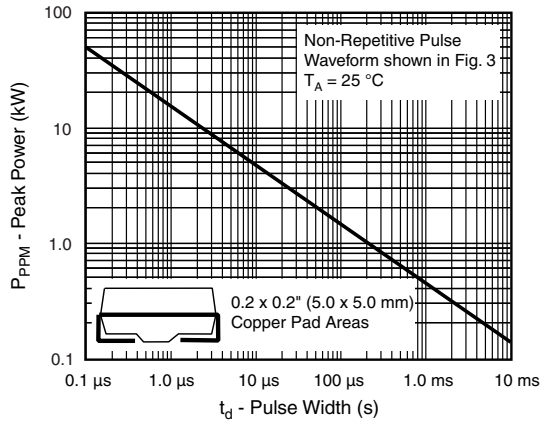


Fig. 1 - Peak Pulse Power Rating Curve

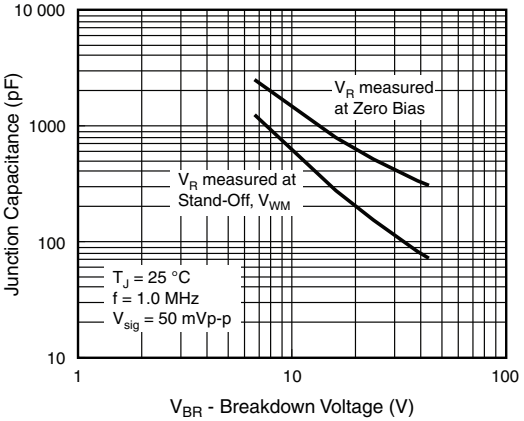


Fig. 4 - Typical Junction Capacitance

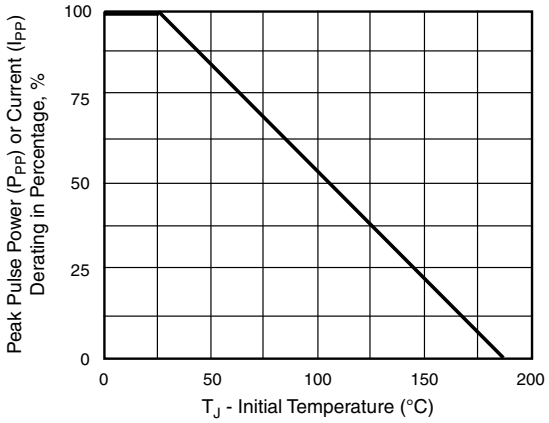


Fig. 2 - Pulse Power or Current vs. Initial Junction Temperature

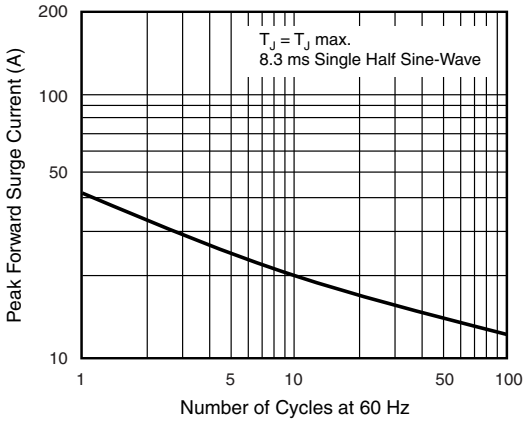


Fig. 5 - Maximum Non-Repetitive Peak Forward Surge Current

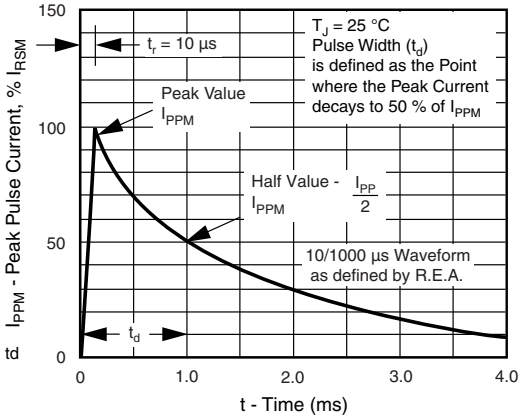
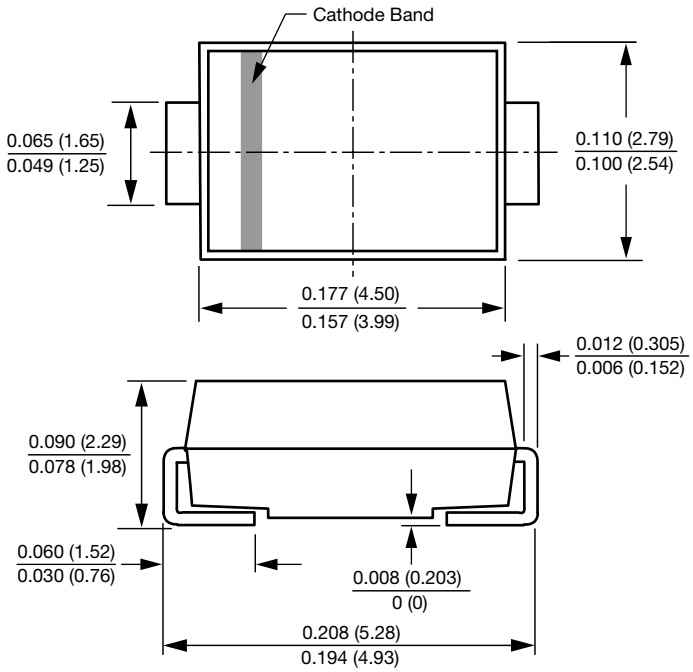


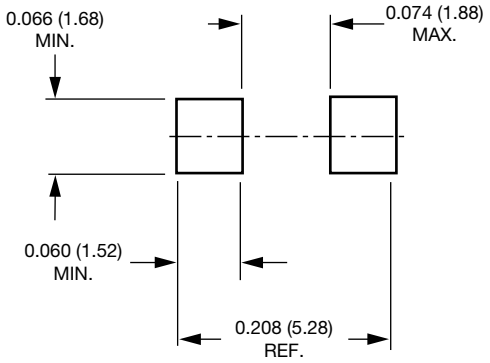
Fig. 3 - Pulse Waveform

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMA (DO-214AC)



Mounting Pad Layout



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