

DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8/20\mu s$) - See Figure 1	P_{PP}	500	Watts
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C
Forward Voltage @ 100mA, 300μs - Square Wave (Note 1)	V_F	1.5	Volts

Note 1: Only applies to unidirectional devices.

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified							
PART NUMBER (See Note 1)	DEVICE MARKING CODE	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	MAXIMUM CAPACITANCE PER LINE
		V_{WM} VOLTS	@ 1mA $V_{(BR)}$ VOLTS	@ $I_p = 1A$ V_C VOLTS	@ 8/20μs $V_C @ I_{PP}$	@ V_{WM} I_D μA	@ 0V, 1 MHz C pF
SMDA03	SDL	3.3	4.0	6.5	10.9V @ 43.0A	125	800
SMDA03C	SDM	3.3	4.5	7.0	10.9V @ 43.0A	125	450
SMDA05	SDA	5.0	6.0	9.8	13.5V @ 42.0A	20	550
SMDA05C	SDB	5.0	6.0	9.8	13.5V @ 42.0A	20	308
SMDA08	SDJ	8.0	8.5	13.4	16.9V @ 34.0A	10	500
SMDA08C	SDK	8.0	8.5	13.4	16.9V @ 34.0A	10	300
SMDA12	SDC	12.0	13.3	19.0	25.9V @ 27.0A	1	185
SMDA12C	SDD	12.0	13.3	19.0	25.9V @ 27.0A	1	105
SMDA15	SDE	15.0	16.7	24.0	30.0V @ 17.0A	1	140
SMDA15C	SDF	15.0	16.7	24.0	30.0V @ 17.0A	1	80
SMDA24	SDG	24.0	26.7	43.0	49.0V @ 12.0A	1	88
SMDA24C	SDH	24.0	26.7	43.0	49.0V @ 12.0A	1	50
SMDA36	SDN	36.0	40.0	51.0	76.8V @ 9.0A	1	80
SMDA36C	SDP	36.0	40.0	51.0	76.8V @ 9.0A	1	45

Note 1: Part numbers with a "C" suffix are bidirectional devices, i.e., SMDA03C.

GRAPHS

FIGURE 1
PEAK PULSE POWER VS PULSETIME

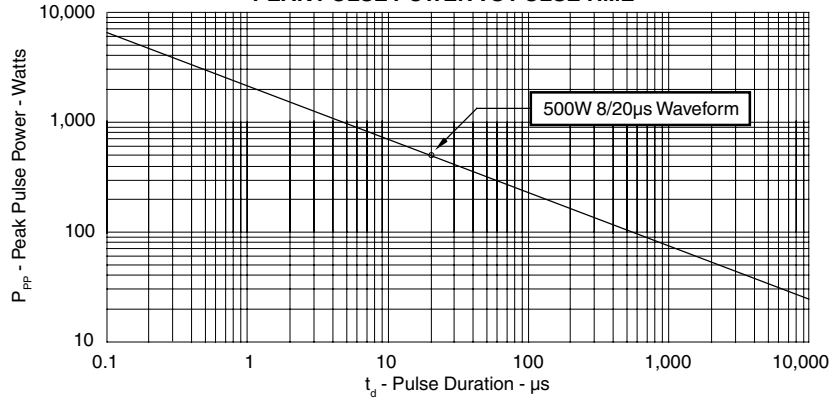


FIGURE 2
PULSE WAVE FORM

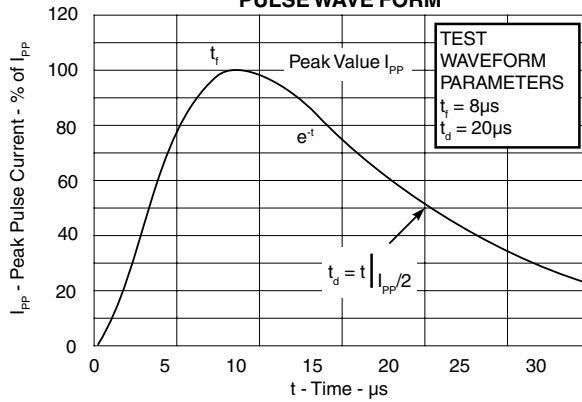
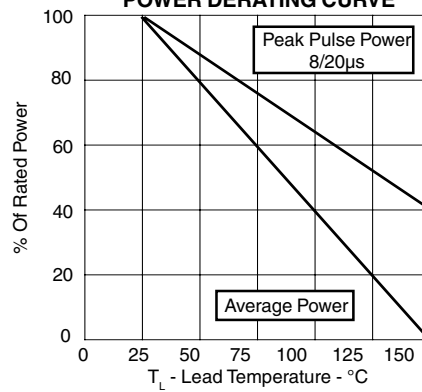
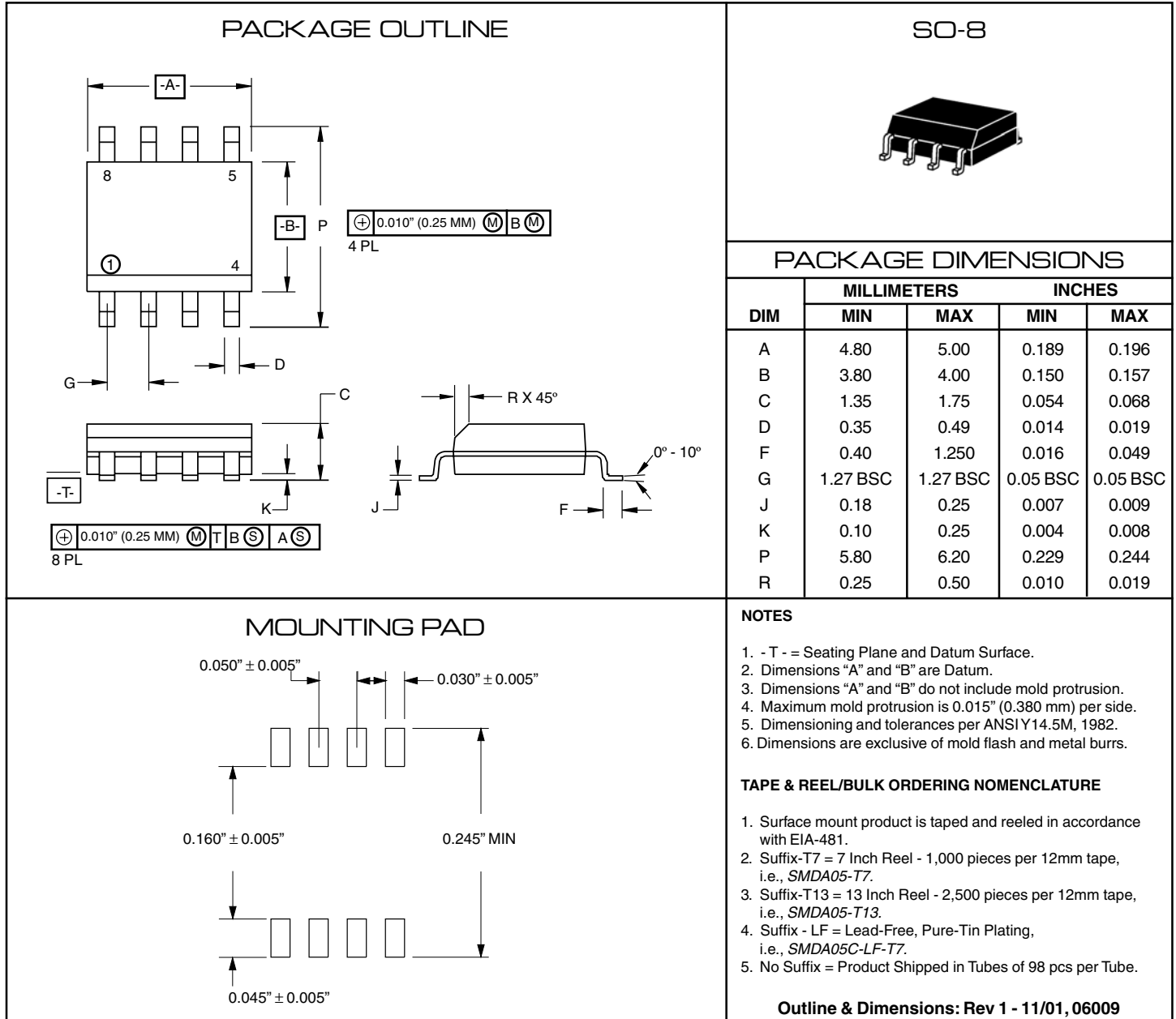


FIGURE 3
POWER DERATING CURVE



PACKAGE OUTLINE & DIMENSIONS



MOUNTING PAD

NOTES

- T - = Seating Plane and Datum Surface.
- Dimensions "A" and "B" are Datum.
- Dimensions "A" and "B" do not include mold protrusion.
- Maximum mold protrusion is 0.015" (0.380 mm) per side.
- Dimensioning and tolerances per ANSI Y14.5M, 1982.
- Dimensions are exclusive of mold flash and metal burrs.

TAPE & REEL/BULK ORDERING NOMENCLATURE

- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix-T7 = 7 Inch Reel - 1,000 pieces per 12mm tape, i.e., *SMDA05-T7*.
- Suffix-T13 = 13 Inch Reel - 2,500 pieces per 12mm tape, i.e., *SMDA05-T13*.
- Suffix - LF = Lead-Free, Pure-Tin Plating, i.e., *SMDA05C-LF-T7*.
- No Suffix = Product Shipped in Tubes of 98 pcs per Tube.

Outline & Dimensions: Rev 1 - 11/01, 06009

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