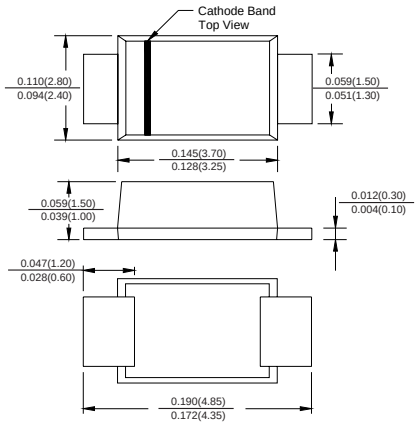
RS2AAF--RS2MAF

FEATURES

- ✧ Low profile package
- ✧ For surface mounted applications
- ✧ Built-in strain relief, ideal for automated placement
- ✧ Plastic package has underwriters, laborator flammability classification 94V-0
- ✧ High temperature soldering: 250°C/10 seconds at terminals

SMAF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- ✧ Case :JEDEC SMAFL, molded plastic over passivated chip
- ✧ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ✧ Polarity: color band denotes cathode end

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	RS2AAF	RS2BAF	RS2DAF	RS2GAF	RS2JAF	RS2KAF	RS2MAF	UNITS
Marking code		RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current T_L=90℃	$I_{F(AV)}$	2.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	50							A

Thermal Characteristics

Characteristic	Symbol	RS2AAF	RS2BAF	RS2DAF	RS2GAF	RS2JAF	RS2KAF	RS2MAF	UNITS
Typical junction capacitance (Note2)	C_J	18							p F
Typical thermal resistance (Note3)	$R_{\Theta JA}$	40							℃/W
	$R_{\Theta JL}$	15							
Opera tingjunction and storage temperature range	T_J T_{STG}	- 55 ------ + 150							℃

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	RS2AAF	RS2BAF	RS2DAF	RS2GAF	RS2JAF	RS2KAF	RS2MAF	UNITS
Maximum instantaneous forward voltage at2.0 A	V_F	1.30							V
Maximum reverse current @T_A=25 ℃	I_R	5.0							μ A
at rated DC blocking voltage @T_A=125℃		200							
Typical reverse recovery time (Note1)	t_{rr}	150				250	500		ns

NOTE: 1.Reverse recovery time test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

3. Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.2"X0.2"(5.0X5.0mm2) copper pad areas

FIG.1 – FORWARD DERATING CURVE

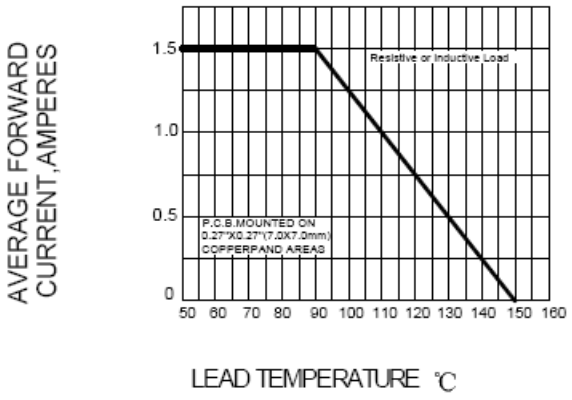


FIG.2 PEAK FORWARD SURGE CURRENT

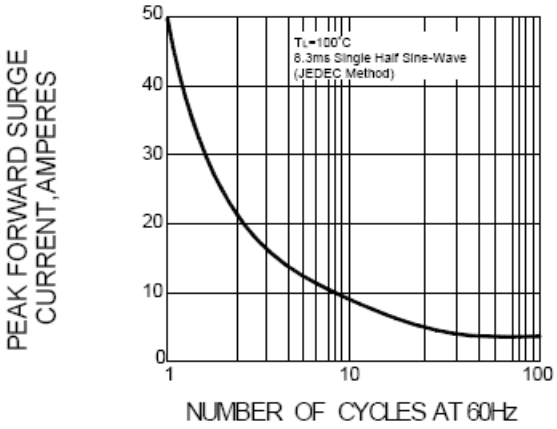


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

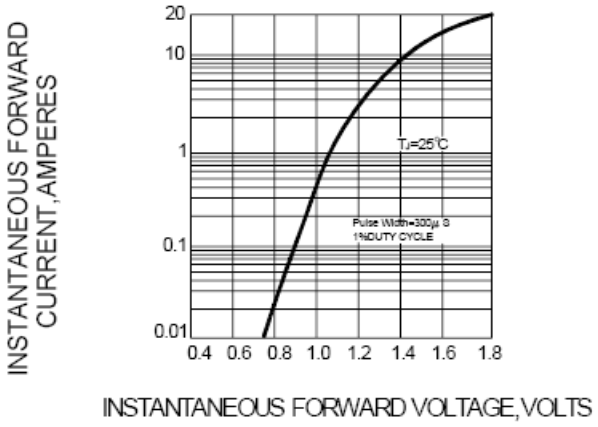


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

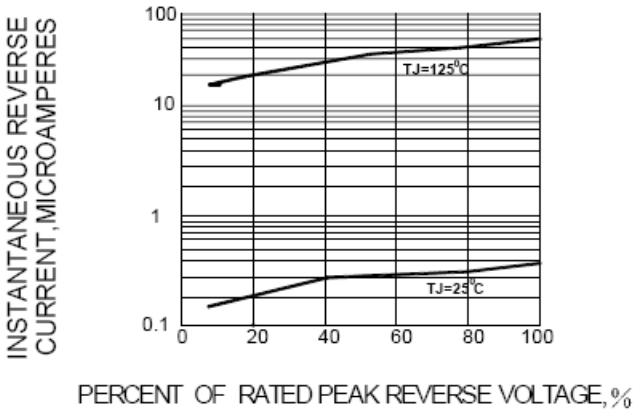
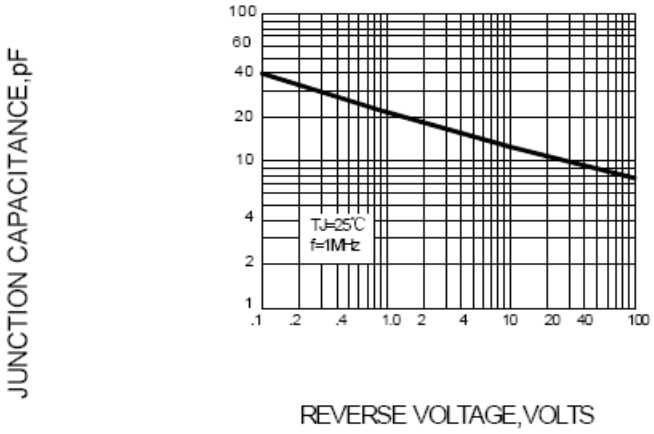


FIG.5-TYPICAL JUNCTION CAPACITANCE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMAF	5000/REEL	80000	36X30.6X31	12.00	11.00