



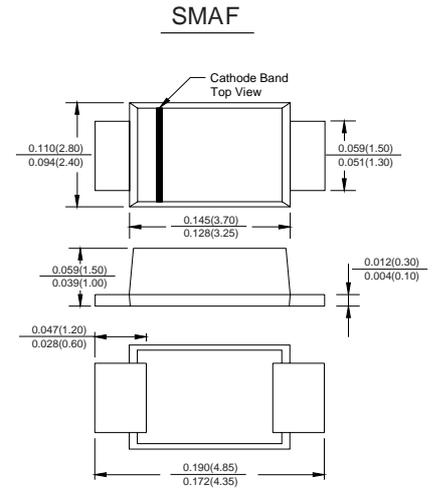
FEATURES

- ✧ 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

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 $T_L=90^\circ\text{C}$	$I_{F(AV)}$	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							°C/W
	$R_{\theta JL}$	15							
Operating junction and storage temperature range	$T_J T_{STG}$	- 55 ----- + 150							°C

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

Characteristic	Symbol	RS2AAF	RS2BAF	RS2DAF	RS2GAF	RS2JAF	RS2KAF	RS2MAF	UNITS
Maximum instantaneous forward voltage at 2.0 A	V_F	1.30							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 200							μA
Typical reverse recovery time (Note1)	t_{rr}	150				250	500		ns

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

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

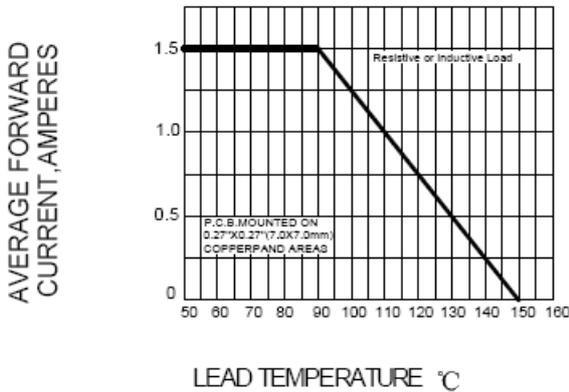


FIG.2 PEAK FORWARD SURGE CURRENT

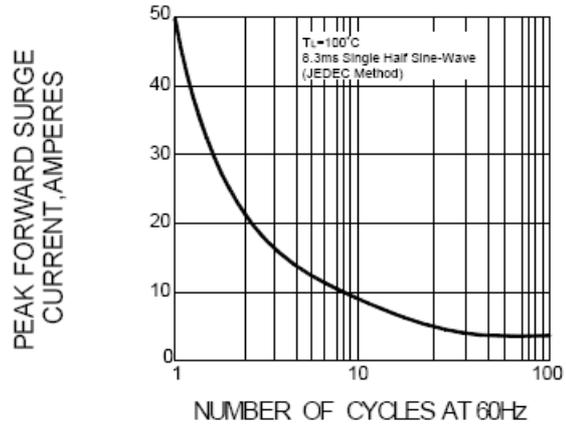


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

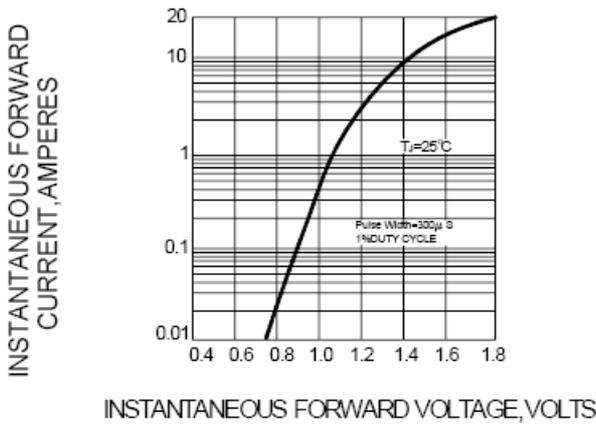


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

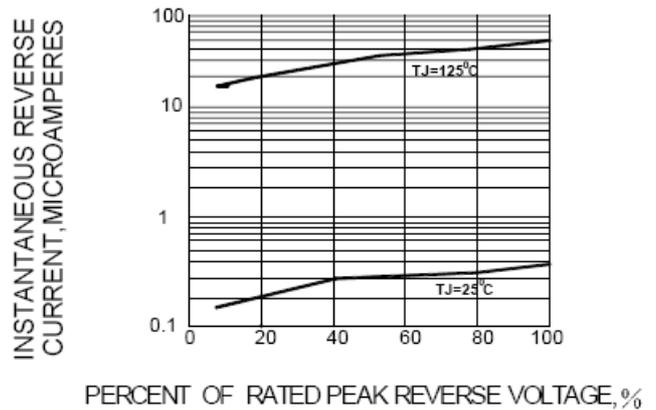
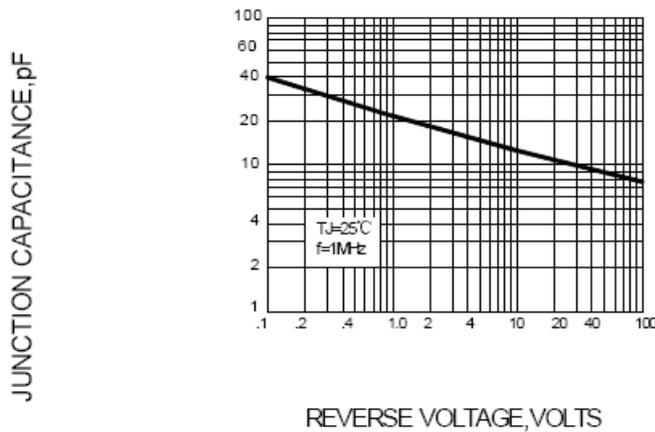


FIG.5-TYPICAL JUNCTION CAPACITANCE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMAF	3000/REEL	120000	30.5X30.5X42.5	12.00	11.00
PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMAF	5000/REEL	100000	30.5X30.5X42.5	10.00	9.00