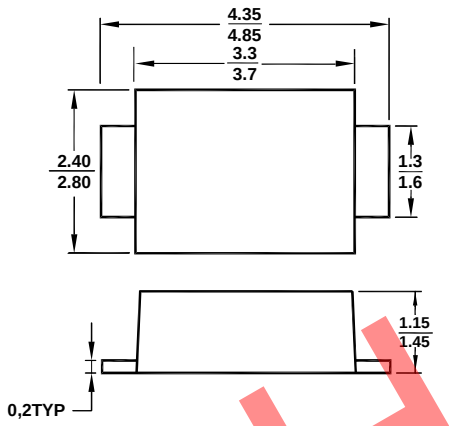
S2AF THRU S2MF

Surface Mount General Rectifiers
Reverse Voltage - 50 to 1000 V
Forward Current - 2 A

SMAFL



All Dimensions in mm

Features
- Low profile package
- For surface mounted applications
- High current capability
- Built-in strain relief,ideal for automated placement
- Plastic package has Underwriters Laboratory flammability classification 94V-0

Mechanical Data
- **Case:** SMAFL molded plastic body
- **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end

Maximum Ratings and Characteristics
Ratings at 25° C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	S2AF	S2BF	S2DF	S2GF	S2JF	S2KF	S2MF	Units
Maximum Repetitive 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 Current at T_L = 100℃	$I_{F(AV)}$	2							A
Peak Forward Surge Current @ TL=110℃ 8.3ms Single Half-Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60							A
Maximum Forward Voltage at I_F = 2 A	V_F	1.0							V
Maximum DC Reverse Current at T_a = 25℃ at Rated DC Blocking Voltage at T_a = 125℃	I_R	5 100							μA
Typical Junction Capacitance [1]	C_J	20							pF
Typical Thermal Resistance [2]	$R_{\theta JL}$	17							℃/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to + 150							℃

[1] Measured at 1 MHz and applied reverse voltage of 4 V.
[2] Thermal resistance from junction to lead

FIG.1 -- FORWARD DERATING CURVE

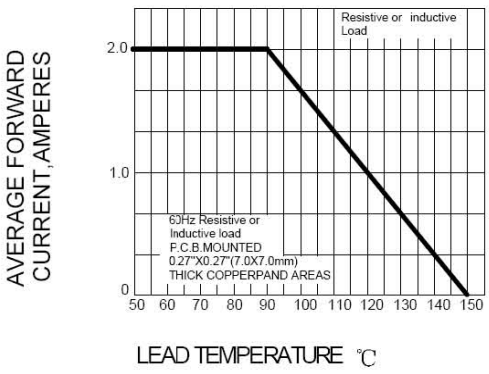


FIG.2 PEAK FORWARD SURGE CURRENT

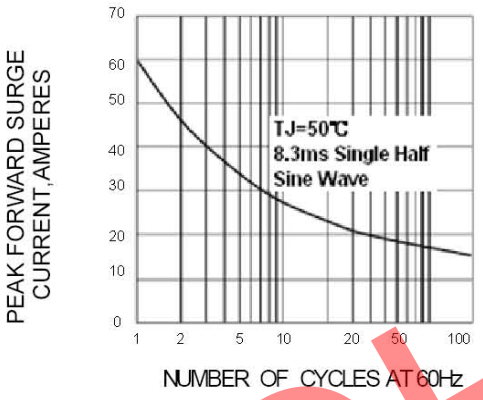


FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

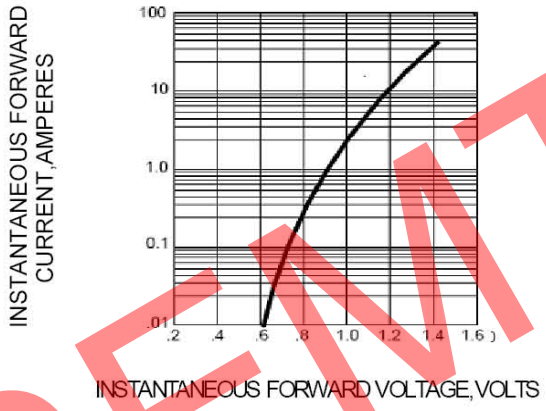


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

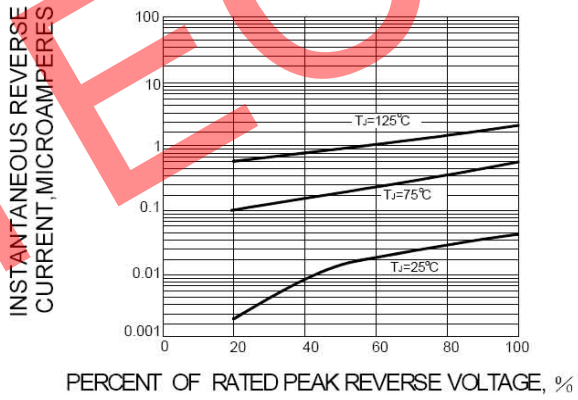


FIG.5-TYPICAL JUNCTION CAPACITANCE