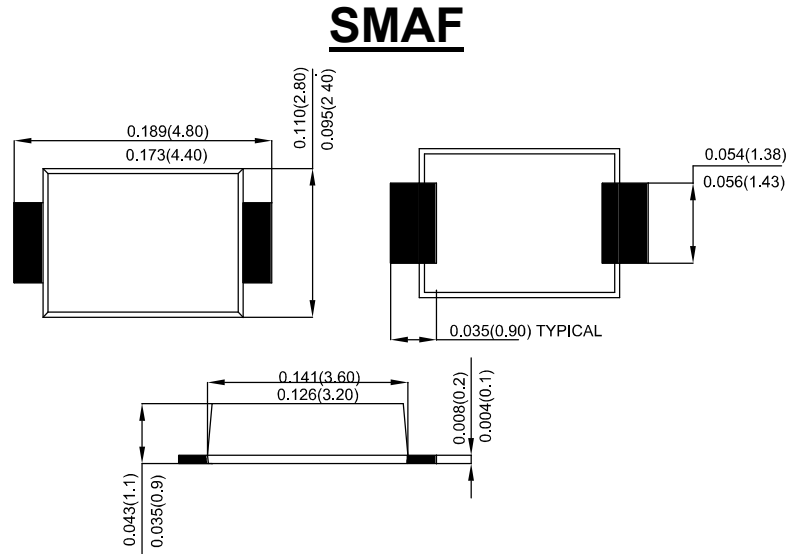


Features

- Schottky Brier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 35A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: Moeded plastic SMAF
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	S12U	S13U	S14U	S145U	S15U	S16U	S18U	S110U	S115U	S120U	S125U	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	250	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	31	35	42	56	70	105	140	175	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	250	V	
Average Rectified Output Current @ $T_A=90^\circ\text{C}$	I_o	1.0											A	
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35											A	
Forward Voltage @ $I_F=1.0A$ (Note 1)	V_{FM}	0.50			0.67		0.82		0.9		0.95		V	
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	0.1						0.05						mA
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$		10						5						
Typical Junction Capacitance	C_J	28											pF	
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JL}$	88											$^\circ\text{C}/\text{W}$	
Operating Temperature Range	T_J	-55 to +150											$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150											$^\circ\text{C}$	

Note: 1.Pulse Test with PW=300usec,1%Duty Cycle.

2.Mounted on P.C.Board with 5.0 mm² (0.13mm thick) copper pad areas.

Fig. 1 Forward Current Derating Curve

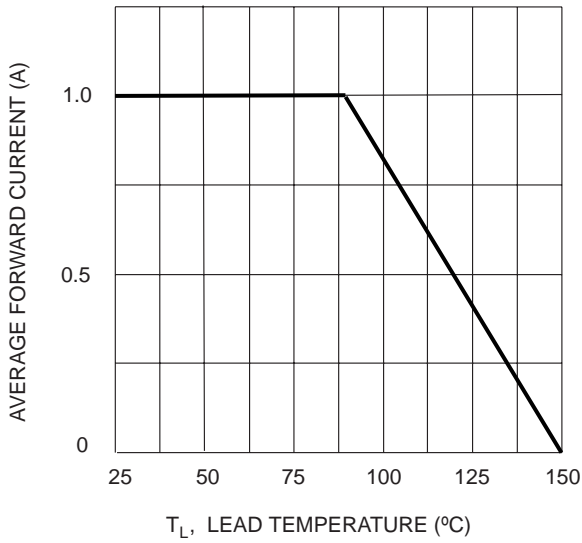


Fig. 2 Typ. Forward Characteristics

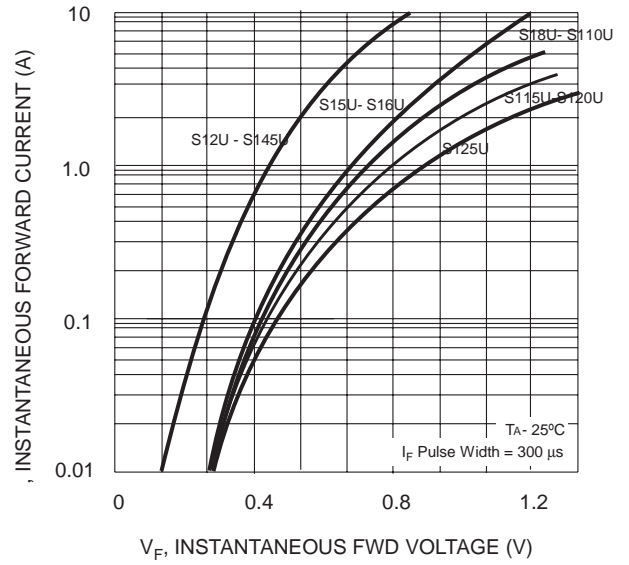


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

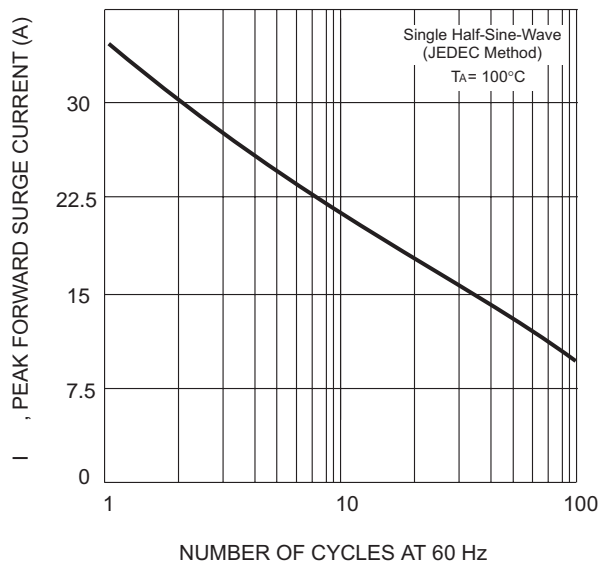


Fig. 4 Typical Reverse Characteristics (per element)

