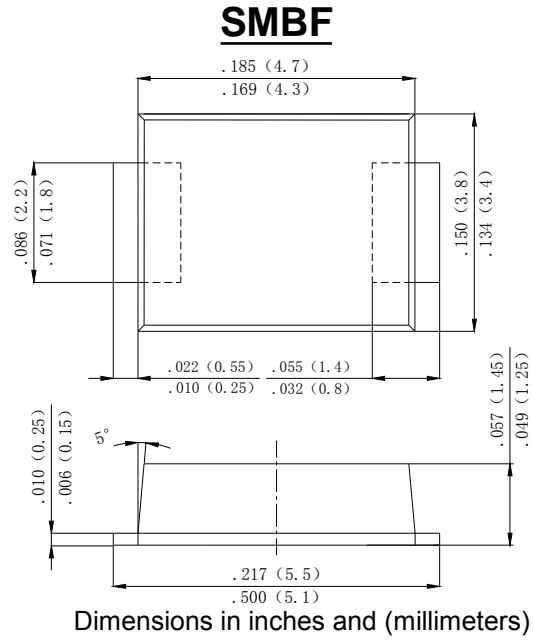


### Features

- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: Molded plastic SMBF
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band dentes 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	SK 52F	SK 53F	SK 54F	SK 545F	SK 55F	SK 56F	SK 58F	SK 510F	SK 515F	SK 520F	SK 525F	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 @ $T_L = 100^\circ C$	$I_F(AV)$	5.0											A	
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100											A	
$I^2t$ Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	41.5											A <sup>2</sup> s	
Forward Voltage @ $I_F=5.0A$	$V_{FM}$	0.55			0.7		0.85		0.92		0.95		V	
Peak Reverse Current @ $T_A = 25^\circ C$	$I_R$	0.1						0.05						mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		10						5						
Typical Junction Capacitance (Note 1)	$C_J$	30											pF	
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JL}$	19											°C/W	
Operating Temperature Range	$T_J$	-55 to +150											°C	
Storage Temperature Range	$T_{STG}$	-55 to +150											°C	

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length .

# SK52F THRU SK525F

Fig. 1 Forward Current Derating Curve

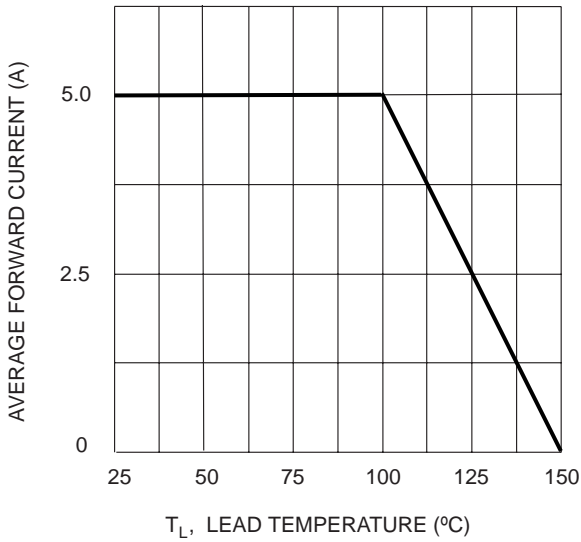


Fig. 2 Typ. Forward Characteristics

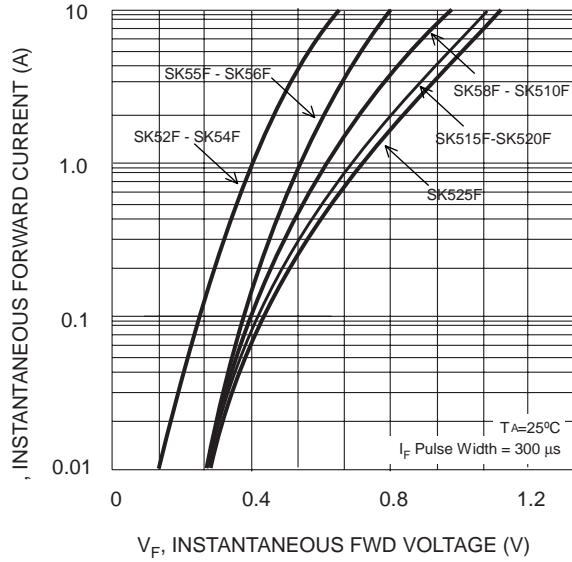


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

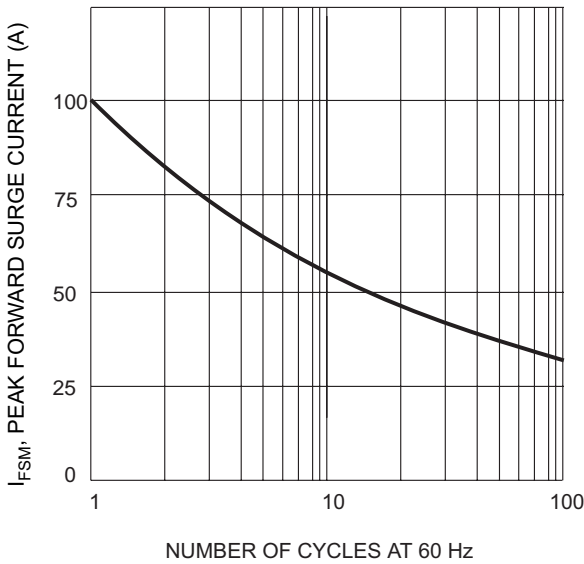


FIG.4 TYPICAL REVERSE CHARACTERISTIC

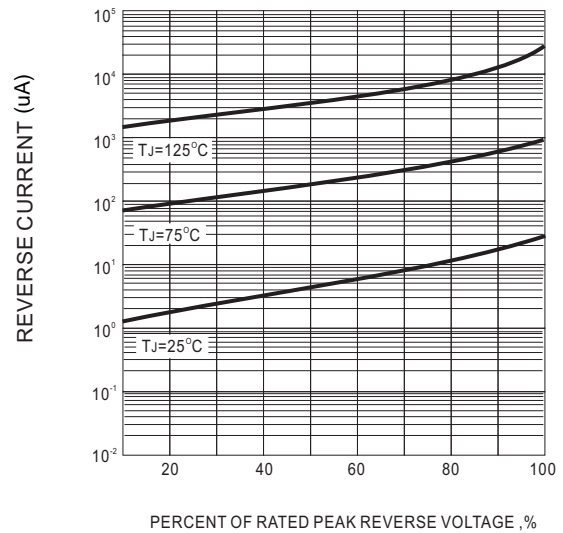
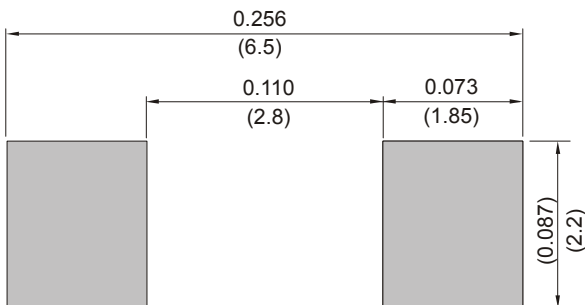


FIG.5 MOUNTING PAD LAYOUT



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