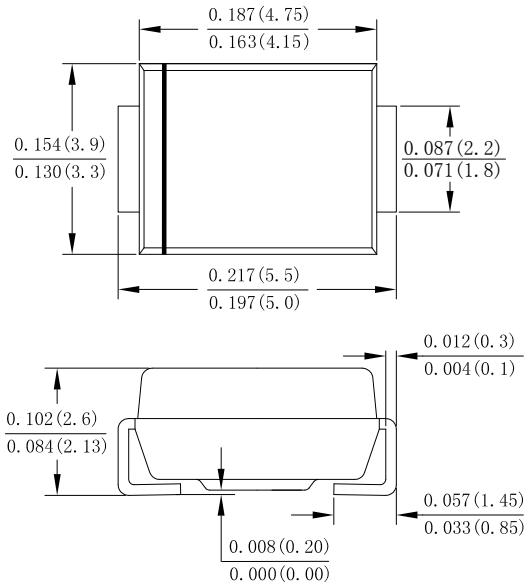
SK54L THRU SK520L

5.0 AMP Surface Mount Schottky Barrier Rectifiers

Features

- High current capacity,low V_F
- 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

Case: SMB (DO-214AA)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic SMB
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Solder Dip: 260℃/10Sec whole body

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	SK54L	SK545L	SK55L	SK56L	SK58L	SK510L	SK515L	SK520L	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	32	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	100	150	200	V
Average Rectified Output Current @T_L =90℃	$I_{F(AV)}$	5.0								A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120								A
Forward Voltage @IF=5.0A (Note 1)	V_{FM}	0.45		0.5		0.6		0.85		V
Peak Reverse Current @T_A =25℃	I_R	0.2				0.05				mA
At Rated DC Blocking Voltage @T_A =100℃		10				5				mA
I^2t Rating for fusing (t <8.3ms)	I^2t	59.76								A^2s
Typical Junction Capacitance (Note 2)	C_J	800		600		170		100		pF
Typical Thermal Resistance	$R_{\theta JA}$	85								℃/W
Operating Temperature Range	T_J	-55 to+150								℃
Storage Temperature Range	T_{STG}	-55 to +150								℃

Note:

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

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

Fig. 1 Forward Current Derating Curve

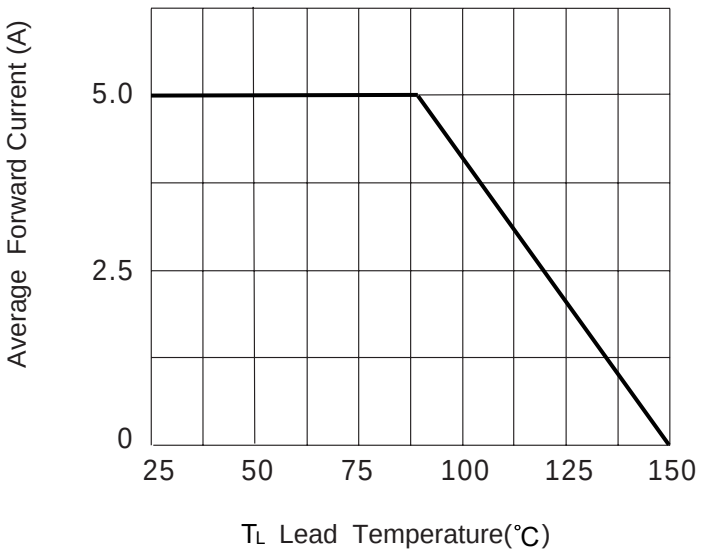


Fig. 2 Typ. Forward Characteristics

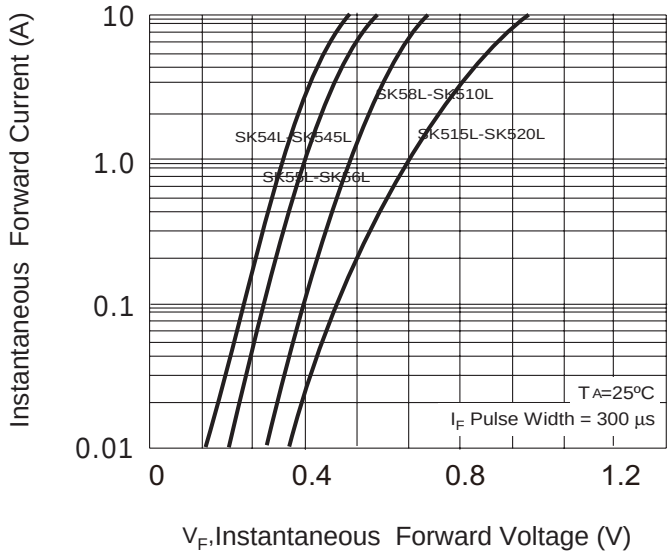


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

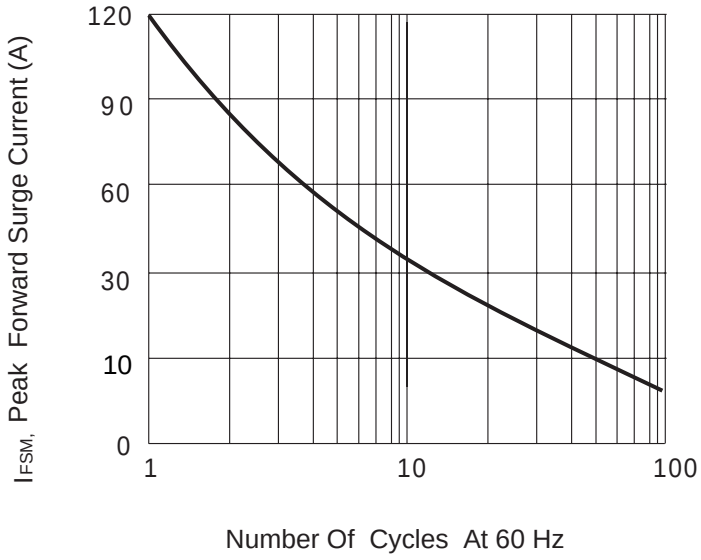


Fig.4 Typical Reverse Chracteristics

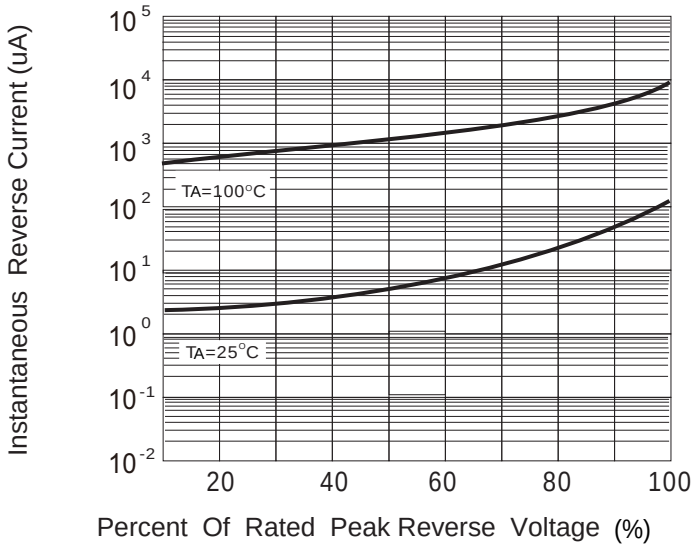
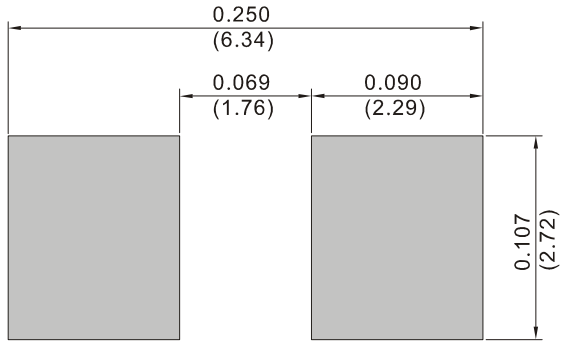


Fig.5 Mounting PAD Layout



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