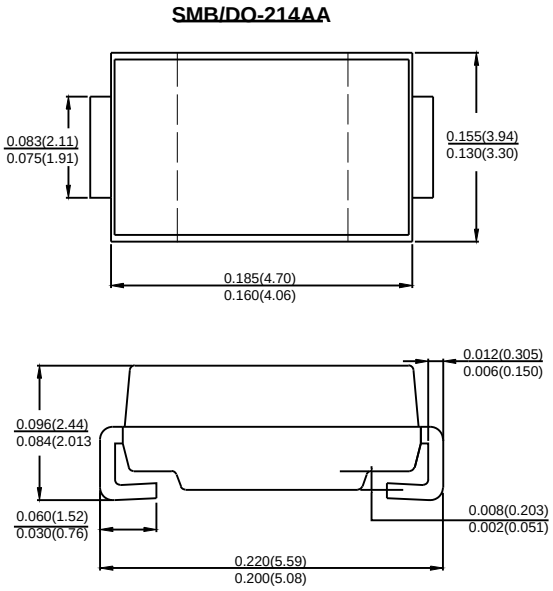
SL52B THRU SL520B

Features

- High current capacity,low V_F
- low power loss,High Efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- Guard Ring Die Construction
- Ideally Suited Automatic Assembly

Mechanical Data

- Case: Moeded plastic SMB
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026
- Polarity: Color band dentes cathode end
- Standard packaging:12mm tape(EIA-481)



Dimensions in inches and (millimeters)

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	SL52B	SL54B	SL56B	SL58B	SL510B	SL515B	SL520B	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	V
Average Rectified Output Current @T_A=90℃	I_O	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	V_{FM}	0.4	0.45	0.5	0.7		0.8	0.85	V
Peak Reverse Current @T_A=25℃	I_R	1			5				mA
At Rated DC Blocking Voltage @T_A=100℃		50.0							
Typical Thermal Resistance Junction to Ambient(Note 1)	$R_{\theta JA}$	17							℃/W
Operating Temperature Range	T_j	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +125							℃

Note: 1. Thermal Resistance from Junction to Ambient at 0.375"(9.5mm) lead length,vertical P.C.Board Mounted

FIG.1 FORWARD CURRENT DERATING CURVE

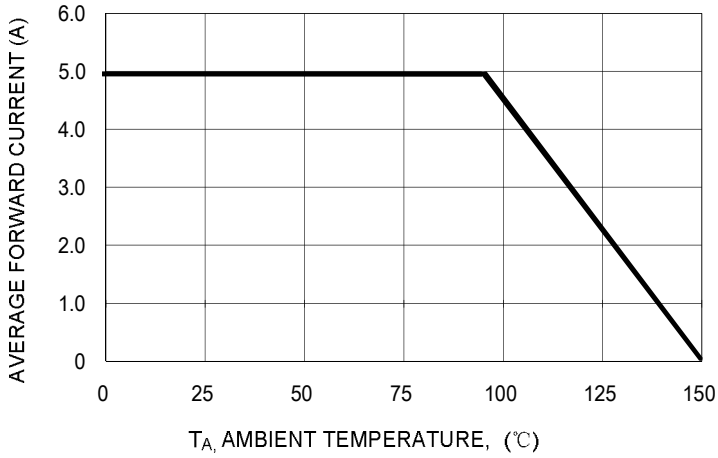


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

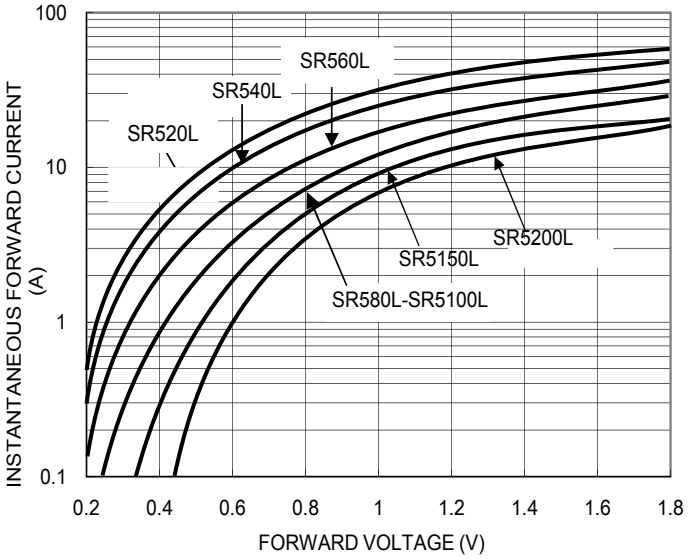


FIG. 3 MAXUMUM FORWARD SURGE CURRENT

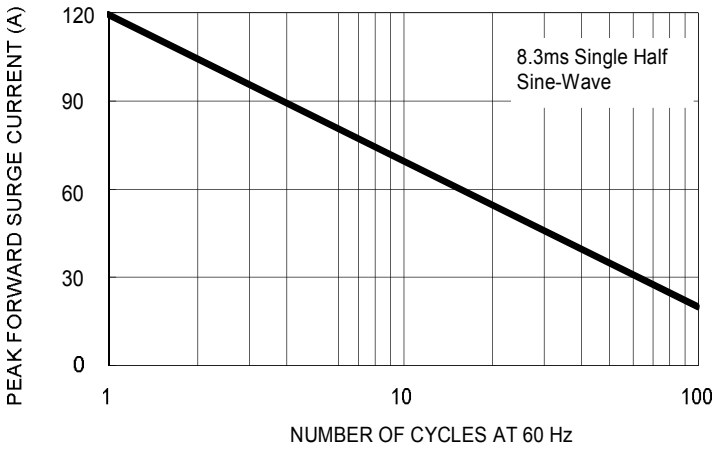


FIG. 4 TYPICAL JUNCTION CAPACITANCE