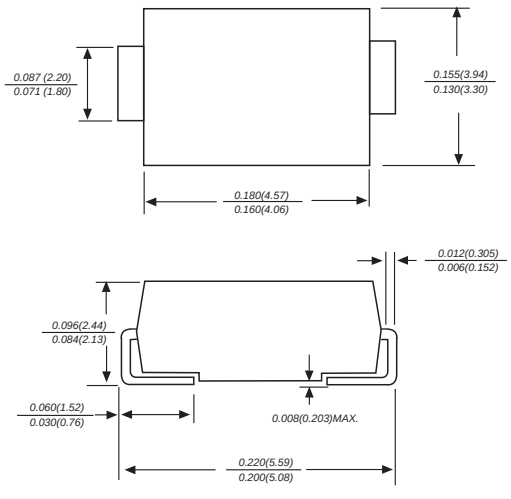
SL52B THRU SL510B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 5.0 Amperes

DO-214AA



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.003 ounce, 0.093 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

MDD Catalog Number	*SYMBOLS*	SL52B	SL53B	SL54B	SL55B	SL56B	SL58B	SL510B	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current at T_L(see fig.1)	$I_{(AV)}$	5.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100.0							A
Maximum instantaneous forward voltage at 5.0A	V_F	0.45			0.50		0.7		V
Maximum DC reverse current T_A=25°C	I_R	0.5					0.2		mA
at rated DC blocking voltage T_A=100°C		20					10		
Typical junction capacitance (NOTE 1)	C_J	200							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	68.0							°C/W
Operating junction temperature range	T_J,	-55 to +125					-55 to +150		°C
Storage temperature range	T_{STG}	-55 to +150							°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

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RATINGS AND CHARACTERISTIC CURVES SL52B THRU SL510B

FIG. 1- FORWARD CURRENT DERATING CURVE

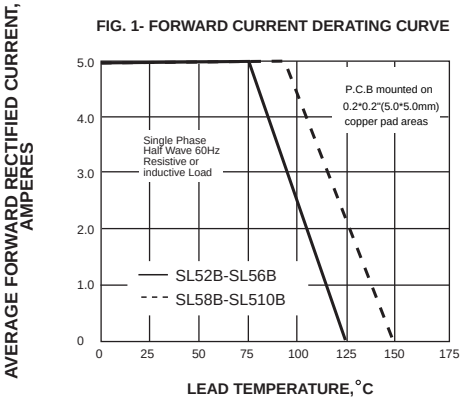


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

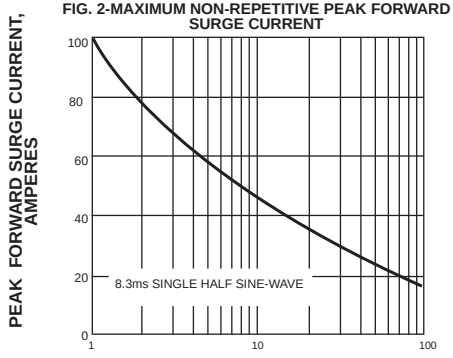


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

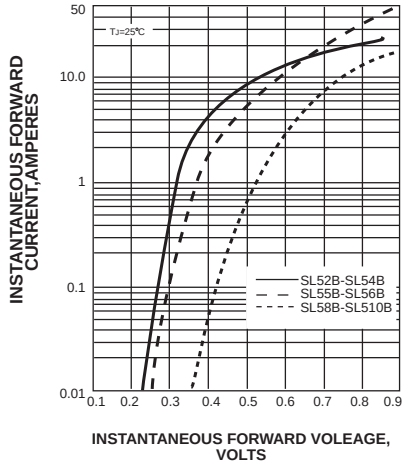


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

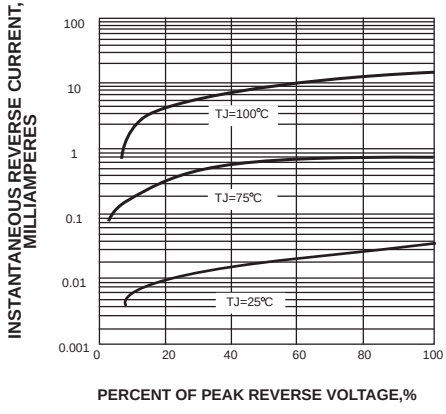


FIG. 5-TYPICAL JUNCTION CAPACITANCE

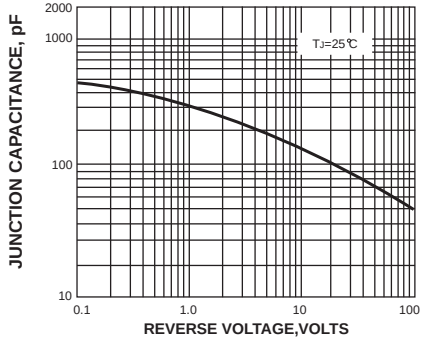
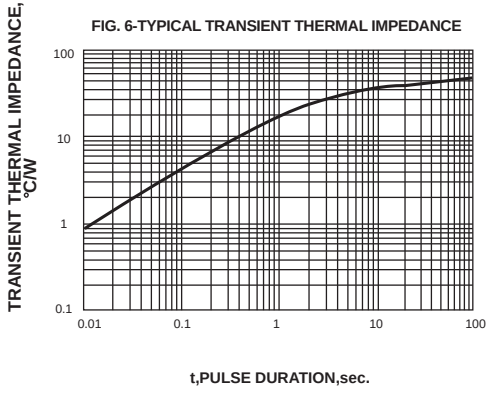


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

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