



YENYO

SS52B THRU SS5DB

Surface Mount Schottky Barrier Rectifier

Features

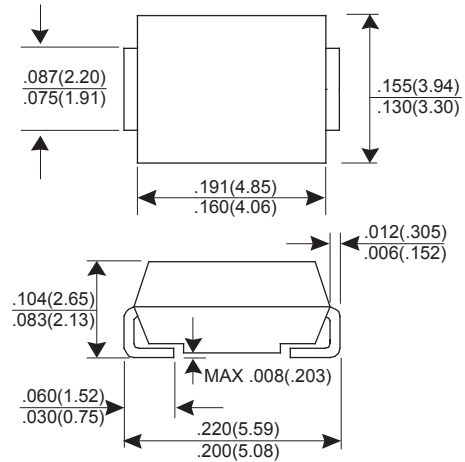
- ★ Low profile package
- ★ Ideal for automated placement
- ★ Guardring for overvoltage protection
- ★ Low power losses, high efficiency
- ★ Low forward voltage drop
- ★ High surge current capability

Mechanical Data

- ★ Case: Molded plastic SMB/DO-214AA
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750 method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any

**Voltage Range 20 to 200V
Current 5.0 Ampere**

SMB/DO-214AA



Dimensions in inches and (millimeters)

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%.

PARAMETER	SYMBOL	SS52B	SS53B	SS54B	SS55B	SS56B	SS58B	SS5BB	SS5CB	SS5DB	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0									A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100									A
Maximum Instantaneous Forward Voltage @ $I_F=5.0A$	V_F	0.55		0.75		0.85		0.95		V	
Maximum DC Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=100^\circ C$	I_R					0.5 20					mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	60									$^\circ C/W$
	$R_{\theta JL}$	19									$^\circ C/W$
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150						$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150									$^\circ C$

NOTES: (1) PCB mounted with 0.55" x 0.55" (14 mm x 14 mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS52B THRU SS5DB

FIG.1 - FORWARD CURRENT DERATING CURVE

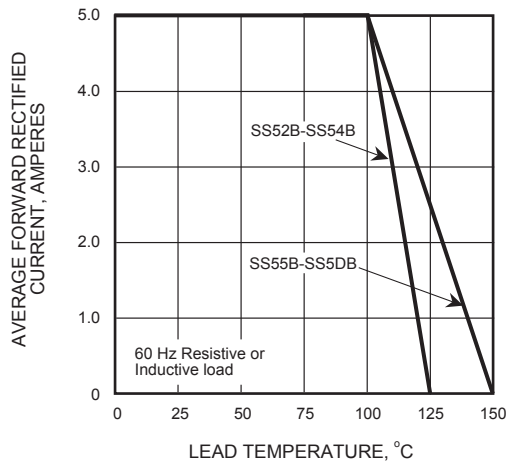


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

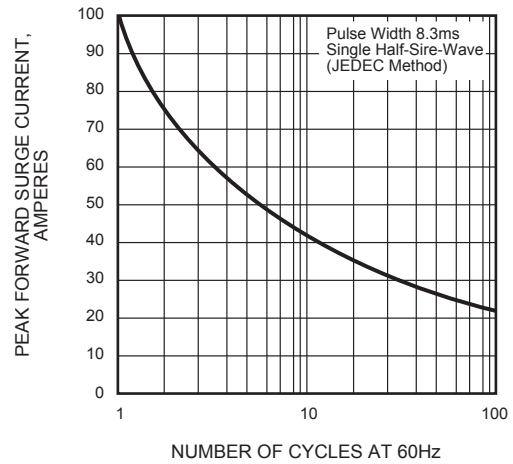


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

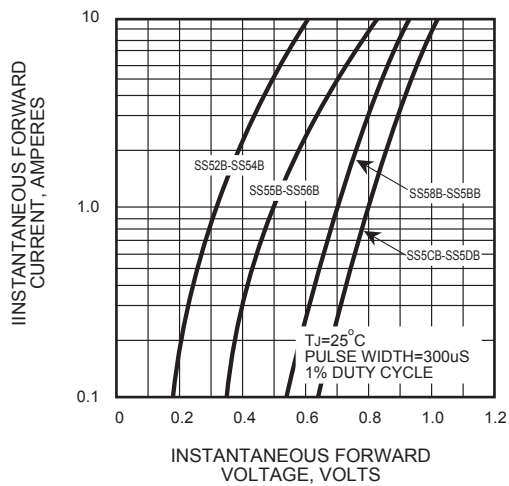


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

