YENYO

SB520 THRU SB560

Schottky Barrier Rectifier

Voltage Range 20 to 60 Volt
Current 5.0 Ampere

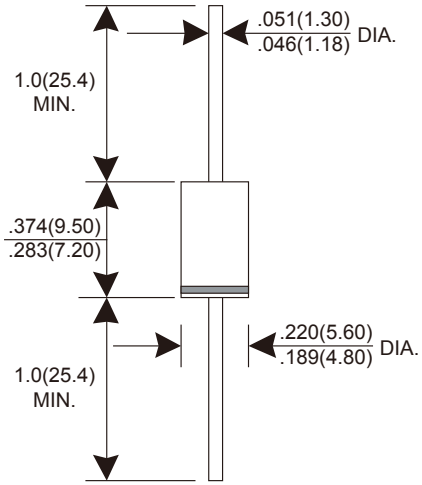
Features

- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ Low reverse leakage current
- ✶ High surge current capability

Mechanical Data

- ✶ Case: Molded plastic, DO-201AD
- ✶ Epoxy: UL 94V-0 rate flame retardant
- ✶ Terminals: Solderable per MIL-STD-202, method 208
- ✶ Polarity: Color band denotes cathode end
- ✶ Mounting position: Any

DO-201AD



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%.

PARAMETER	SYMBOL	SB520	SB540	SB560	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	V
Maximum RMS voltage	V_{RMS}	14	28	42	V
Maximum DC blocking voltage	V_{DC}	20	40	60	V
Maximum average forward rectified current at 0.375" (9.5 mm) lead length (Fig. 1)	$I_{F(AV)}$	5.0			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	150			A
Maximum instantaneous forward voltage @ I_F=5.0A	V_F	0.55		0.7	V
Maximum DC reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	0.5 50			mA
Typical thermal resistance from junction to ambient (Note 1)	$R_{\theta JA}$	25			℃/W
Operating junction temperature range	T_J	-55 to +125		-55 to +150	℃
Storage temperature range	T_{STG}	-55 to +150			℃

NOTES : (1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

RATINGS AND CHARACTERISTICS CURVES SB520 THRU SB560

Fig.1 - Forward Current Derating Curve

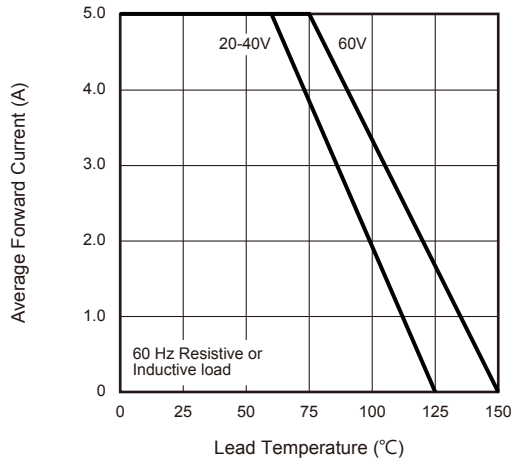


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

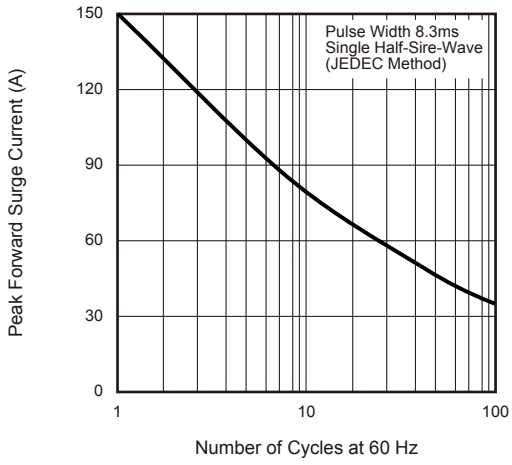


Fig.3 - Typical Instantaneous Forward Characteristics

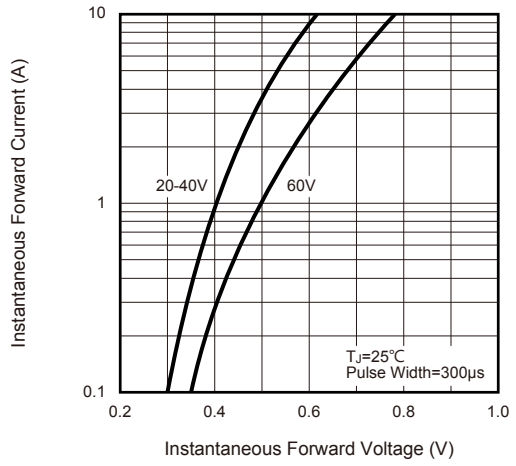


Fig.4 - Typical Reverse Leakage Characteristics