

Features

- Metal silicon junction, majority carrier conduction
- The plastic carries Underwriters Laboraton Flammability Classification 94V-0
- Low reverse leakage
- High forward surge current capability
- High temperature solding guaranteed:
250°C/10 seconds,0.375" (9.5mm)lead length ,
5 lbs(2.3kg)terminals



DO-15

Mechanical Date

- **Case:** JEDEC DO-15 molded plastic body
- **Terminals:** Plated axial leads,solderable
per MIL-STD-750,Method 2026
- **Polarity :**Color band denotes cathode end
- **Mounting Position:** Any
- **Weight:**0.014 ounce, 0.40 grams

Major Ratings and Characteristics

$I_{F(AV)}$	2.0 A
V_{RRM}	20 V to 200 V
I_{FSM}	60 A
V_F	0.55~0.95
$T_J \text{ max.}$	150 °C

Maximum Ratings & Thermal Characteristics

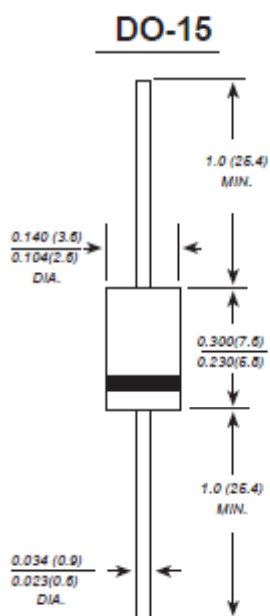
Ratings at 25°C ambient temperature unless otherwise specified.Single phase, half wave, 60HZ, resistive or inductive load.

For capacitive load, derate current by 20%.

Items	Symbols	SB 220	SB 230	SB 240	SB 250	SB 260	SB 270	SB 280	SB 290	SB 2100	SB 2150	SB 2200	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	70	80	90	100	150	200	V
Maximum Average Forward Rectified Current 0.375"(9.5mm)lead length (see fig.1)	I _(AV)	2.0											A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50											A
Maximum instantaneous forward voltage at 2.0A	V _F	0.55			0.7		0.85					0.95	V
Maximum DCreverse current T _A =25℃ at rated DCblocking voltage T _A =100℃	I _R	0.5									0.2		mA
		10.0					5.0			2.0			
Typical junction capacitance NOTE 1	C _J	220			80								pF
Typical thermal resistance NOTE2	R _{θJA}	50											℃/W
Operating junction temperature range	T _J	-65 to +125					-65 to +150						℃
Storage temperature range	T _{STG}	-65 to +150											℃

TOTE:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance from junction tko ambient at 0.375"(9.5mm)lead length,P.C.B.mounted



Dimensions in inches and (millimeters)

FIG. 1- FORWARD CURRENT DERATING CURVE

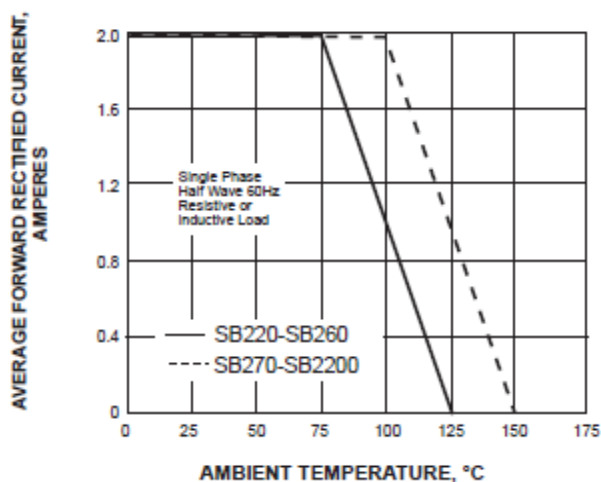


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

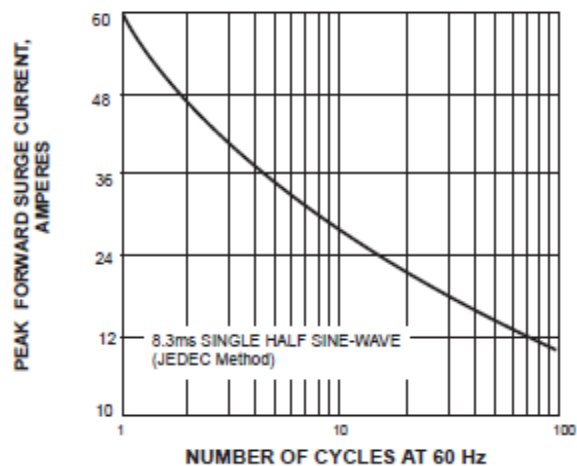


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

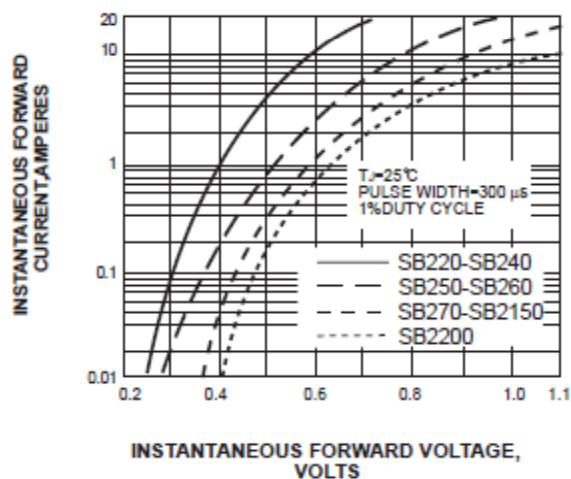


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

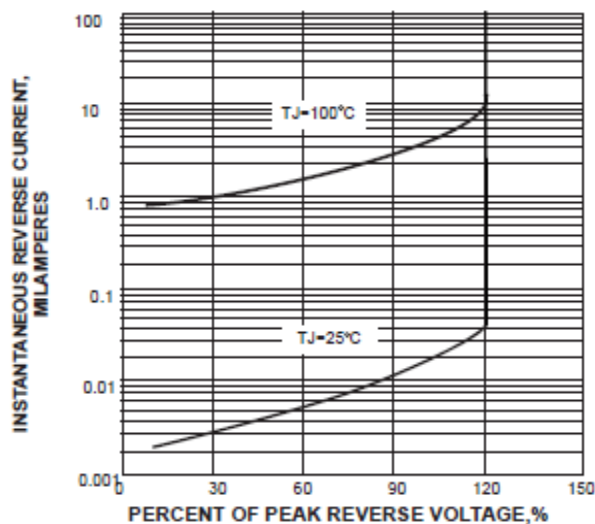


FIG. 5-TYPICAL JUNCTION CAPACITANCE

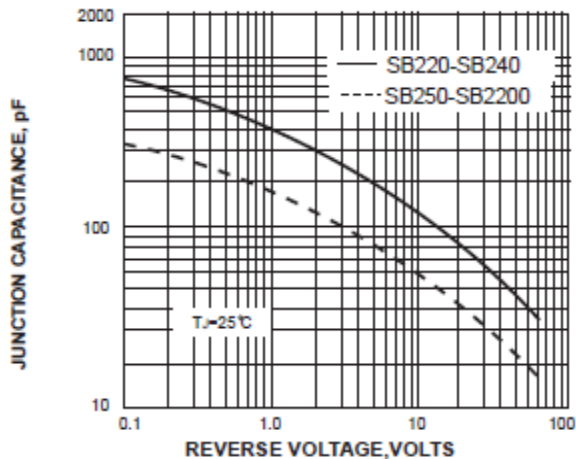


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

