

**Features**

- Low power loss ,high efficiency
- For use in low voltage high frequency inverters, free wheeling,and polarity protection applications
- Guarding for over voltage protection
- High temperature soldering guaranteed:  
260°C/10 seconds at terminals

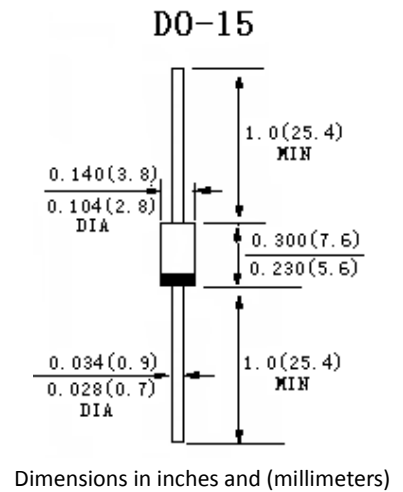
**Mechanical Data**

**Case:** DO-15 Molded plastic

**Polarity:** Color band denotes cathode end

**Lead:** Pure tin plated, lead free

**Mounting Position:** Any



**Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60 Hz, resistive or inductive load

For capacitive load, derate current by 20%

TYPE NUMBER	Symbols	SB220	SB230	SB240	SB250	SB260	SB280	SB2100	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 9.5mm lead length (See fig. 1)	$I_{F(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.5		0.7		0.85		V	
Maximum instantaneous reverse current at rated DC blocking voltage $T_a=25^\circ C$ $T_a=100^\circ C$	$I_R$	0.5 10							mA
Operating junction temperature range	$T_J$	-55to+150							°C
Storage temperature range	$T_{stg}$	-55to+150							°C

Characteristic Curves

Fig. 1 - Forward Current Derating Curve

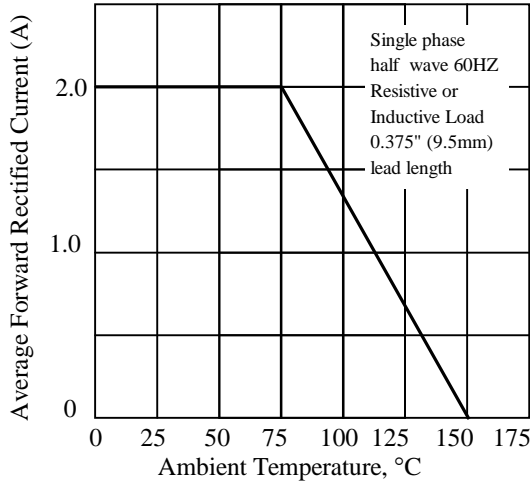


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

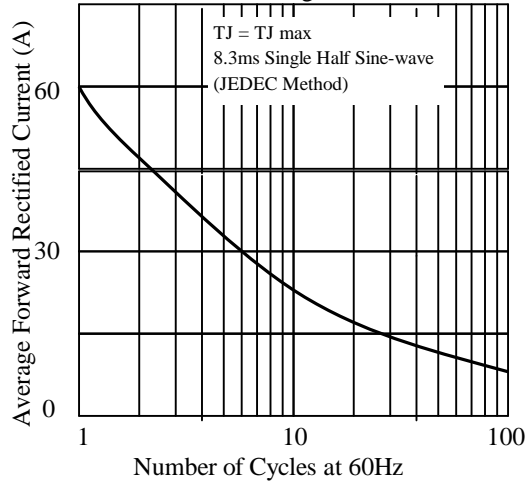


Fig 3. - Typical Instantaneous Forward Characteristics

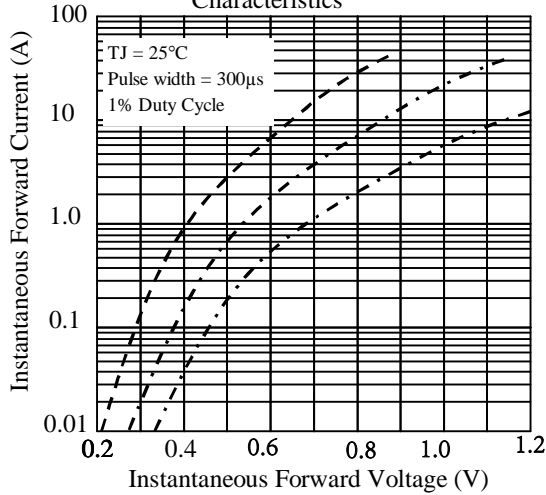


Fig 4. - Typical Reverse Characteristics

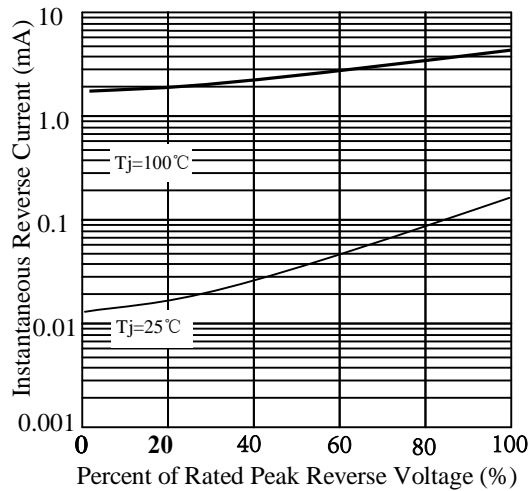


Fig 5. - typical Junction Capacitance

