

Features

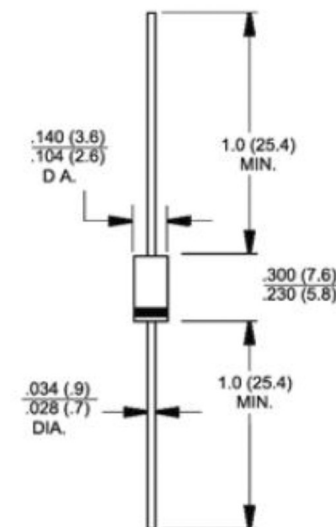
- ◆ Metal-Semiconductor junction with guard ring
- ◆ Epitaxial construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ The plastic material carries UL recognition 94V-0
- ◆ For use in low voltage , high frequency inverters , free wheeling , and polarity protection applications


DO-204AC (DO-15)

2018

Mechanical Data

- ◆ Case : JEDEC DO-204AC(DO-15) molded plastic
- ◆ Polarity : Color band denotes cathode
- ◆ Weight : 0.014 ounce , 0.39 gram
- ◆ Mounting position : Any



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 , derate current by 20%

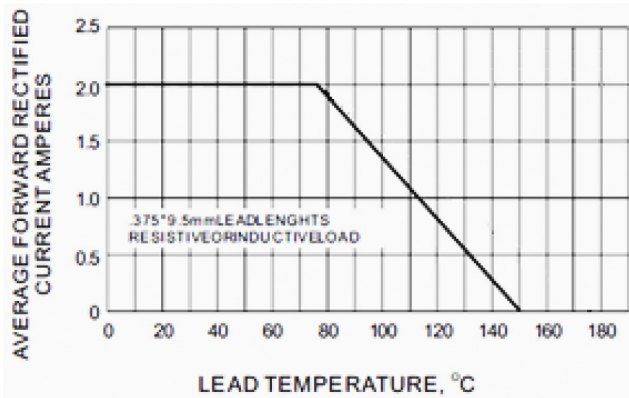
Parameter	Symbol	SB 2B5	SB2C0	Units
Maximum repetitive peak reverse voltage	V_{RRM}	150	200	Volts
Maximum RMS voltage	V_{RMS}	105	140	Volts
Maximum DC blocking voltage	V_{DC}	150	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_L=100^{\circ}C$	$I_{F(AV)}$	2.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	60		Amps
Maximum DC reverse current @ $T_j=25^{\circ}C$ at rated DC blocking voltage @ $T_j=100^{\circ}C$	I_R	0.01 2		mA
Maximum forward voltage at 2.0A DC	V_F	0.90		Volts
Typical thermal resistance(Note 2)	$R_{\theta JL}$	27		$^{\circ}C/W$
Operating junction temperature range	T_j	-55 to +150		$^{\circ}C$
storage temperature range	T_{STG}	-55 to +150		$^{\circ}C$

Notes: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

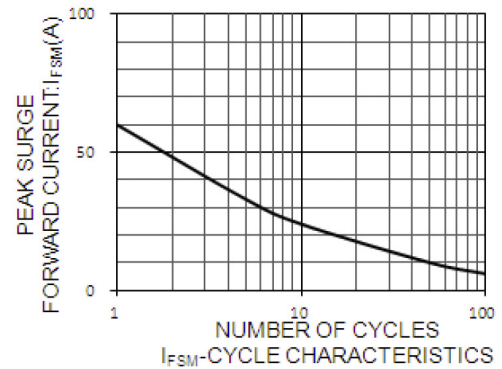
2. Thermal Resistance Junction to Lead.

RATINGS AND CHARACTERISTIC CURVES

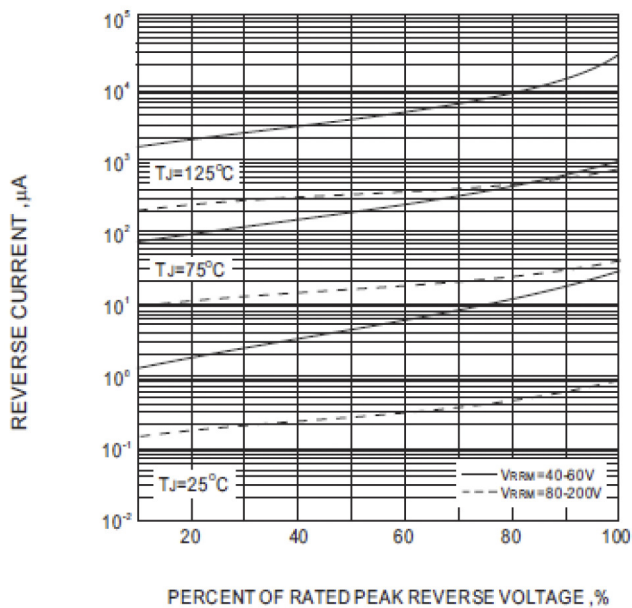
F1G.1 – FORWARD CURRENT DERATING CURVE



F1G. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3 – TYPICAL REVERSE CHARACTERISTIC



F1G.4 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

