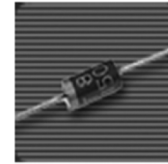
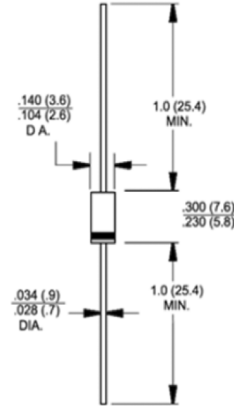


Features

- Metal-Semiconductor junction with guardring
- 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)

Mechanical Data

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

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

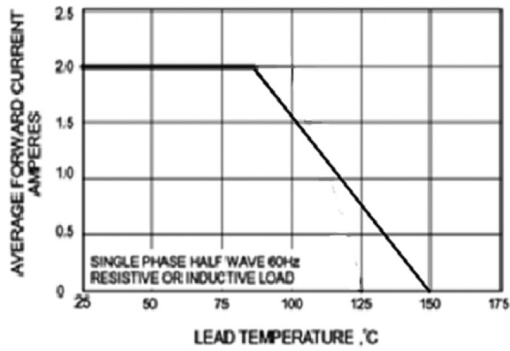
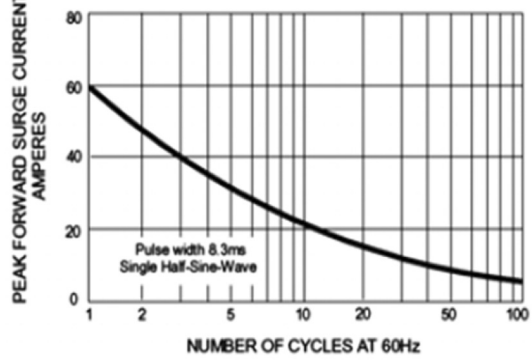
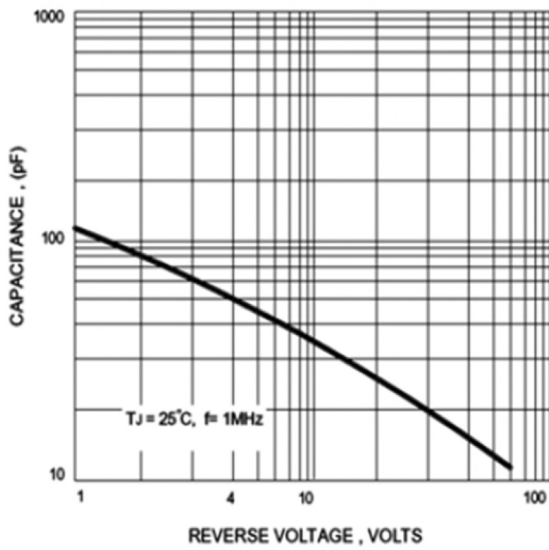
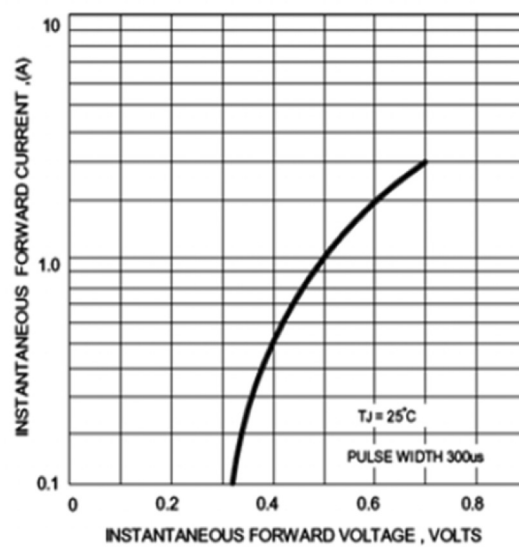
Single phase, half wave, 60HZ, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SB270	SB280	SB290	SB2B0	UNIT
Maximum repetitive peak reverse voltage	VRRM	70	80	90	100	V
Maximum RMS voltage	VRMS	49	56	63	70	V
Maximum DC blocking voltage	VDC	70	80	90	100	V
Maximum average forward rectified current @ $T_L=100^\circ\text{C}$	IF(AV)	2.0				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	60				A
Maximum forward voltage at 2A DC $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	VF	0.79 0.69				V
Maximum DC reverse current at rated DC blocking voltage ⁽¹⁾	$T_J=25^\circ\text{C}$	0.05				mA
	$T_J=125^\circ\text{C}$	1				
Typical junction capacitance (Note 1)	C_j	50				pF
Typical thermal resistance(Note 2)	$R_{\theta JA}$	85				°C/W
	$R_{\theta JC}$	45				
	$R_{\theta JL}$	40				
Operating junction temperature range	T_J	- 55 to + 150				°C
storage temperature range	T_{STG}	- 55 to + 150				°C

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

2. Thermal Resistance at .375(9.5mm) Lead Length, PC Board Mounted

RATINGS AND CHARACTERISTICS CURVES
FIG.1 - FORWARD CURRENT DERATING CURVE

FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

FIG.3 - TYPICAL JUNCTION CAPACITANCE

FIG.4 - TYPICAL FORWARD CHARACTERISTICS

FIG.5 - TYPICAL REVERSE CHARACTERISTICS
