

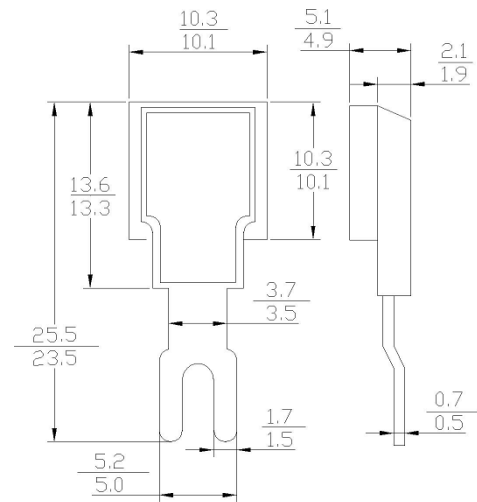
FEATURES

- High current capability
- High voltage available
- Glass passivated die construction
- High surge current capability
- 50Ampere Operation At $T_L=125^{\circ}\text{C}$ With No Thermal Runaway

MECHANICAL DATA

- BD502-P P-Positive
- BD502-N N-Negative

BLOCK DIODE



Dimension in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C Ambient temp. Unless otherwise specified. Single phase, half sine wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%

	SYMBOL	BD502	BD504	BD506	UNITS
Maximum Current Peak Reverse Voltage	VRRM	200	400	600	Volts
Maximum RMS Voltage	VRMS	140	280	420	Volts
Maximum DC Blocking Voltage	VDC	200	400	600	Volts
$T_L=100^{\circ}\text{C}$ Maximum Average Forward Rectified Current	I(AV)	50			Amps
Peak Forward Surge Current 8.3ms Single Sine-wave on Rated Load (JEDEC Method)	IFSM	500			Amps
Maximum Instantaneous Forward Voltage Drop at 50A DC	VF	1.1			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5 500			μA
Typical thermal resistance	$R_{\theta JA}$	1.0			$^{\circ}\text{C}/\text{W}$
Operating AND Storage Temperature Range	TSTG/ T_J	-55 to +150			$^{\circ}\text{C}$

FIG. 1 –MAXIMUM AVERAGE FORWARD CURRENT DERATING

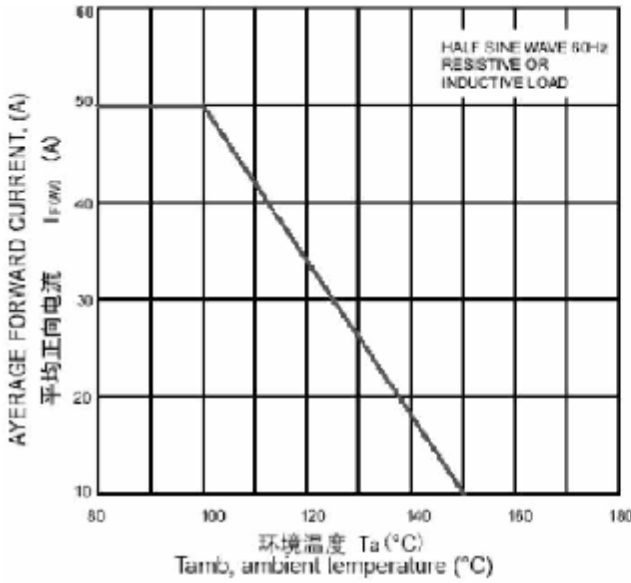


FIG. 2 –MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

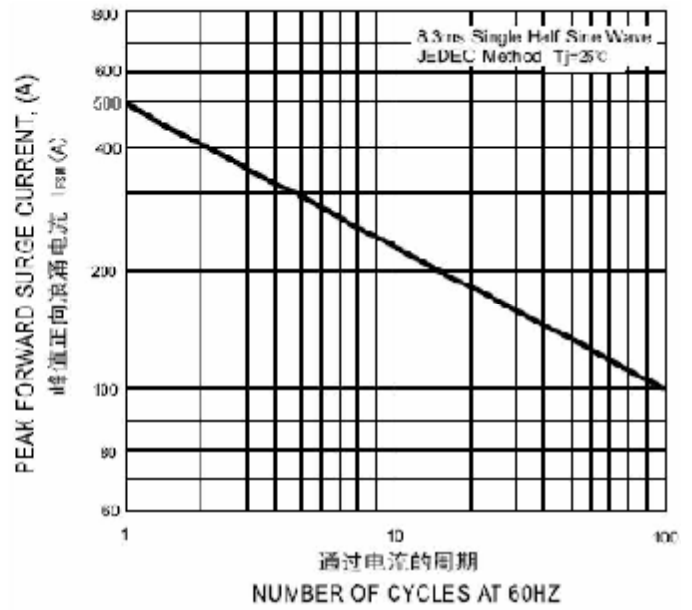


FIG. 3 –TYPICA REVERSE CHARACTERISTICS

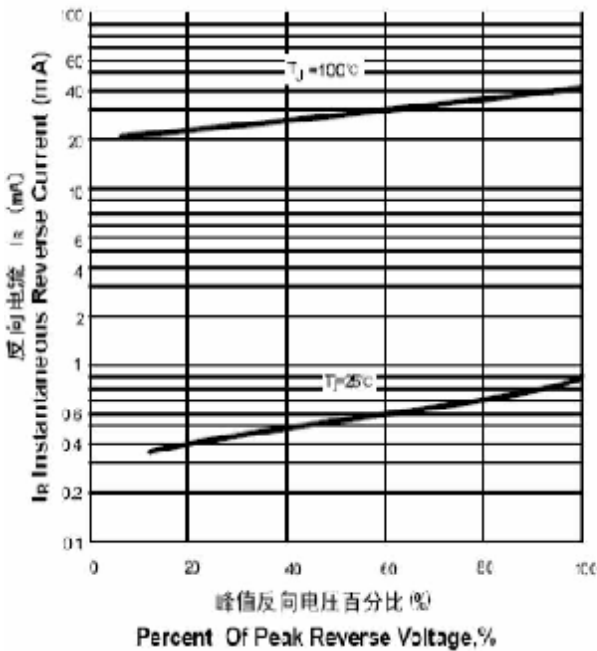


FIG.4 –TYPICA FORWARD CHARACTERISTICS

