BL GALAXY ELECTRICAL

MBR1680PT---MBR16100PT

DUAL SCHOTTKY RECTIFIERS

VOLTAGE RANGE: 80 - 100 V
CURRENT: 16 A

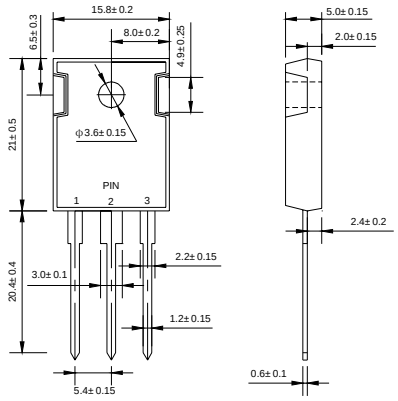
FEATURES

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

MECHANICAL DATA

- ◇ Case:JEDEC TO-3P,molded plastic body
- ◇ Terminals:Solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.223 ounce, 6.3 grams
- ◇ Position: Any

TO-3P



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

		MBR 1680PT	MBR 16100PT	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	80	100	V
Maximum RMS Voltage	V_{RMS}	56	70	V
Maximum DC blocking voltage	V_{DC}	80	100	V
Maximum average forw ard total device rectified current @T_C = 125°C	$I_{F(AV)}$	16		A
Peak forw ard surge current 8.3ms single half sine-w ave superimposed on rated load	I_{FSM}	150		A
Maximum forw ard voltage per leg (I_F=8.0A,T_C=25℃) (NOTE 1)	V_F	0.85		V
Maximum reverse current @T_C=25℃	I_R	1.0		m A
at rated DC blocking voltage @T_C=125℃		100		
Maximum thermal resistance (NOTE 2)	$R_{\theta JC}$	1.5		℃/W
Operating junction temperature range	T_J	- 55 ---- + 150		℃
Storage temperature range	T_{STG}	- 55 ---- + 150		℃

NOTE: 1. Pulse test:300μs pulse width,1% duty cycle.
2. Thermal resistance from junction to case and thermal resistance from junction to ambient.

www.galaxycn.com

FIG.1 -- FORWARD CURRENT DERATING CURVE

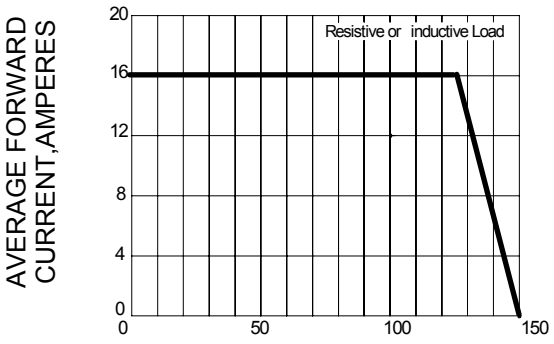


FIG.2 -- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

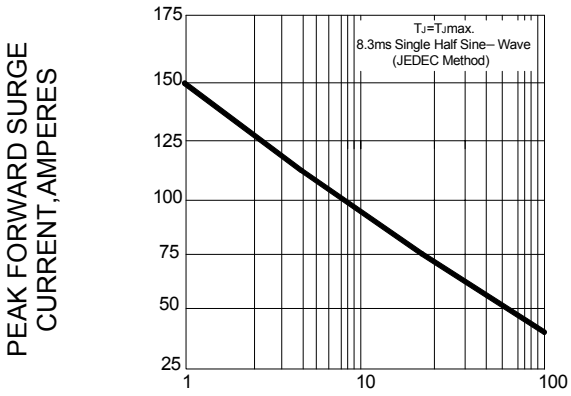


FIG.3 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PERLEG

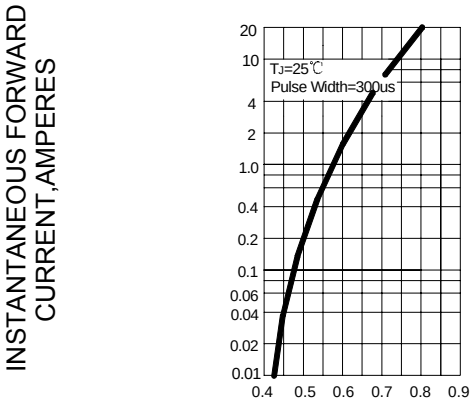


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS