DUAL SCHOTTKY RECTIFIERS

VOLTAGE RANGE: 70 - 100 V
CURRENT: 20 A

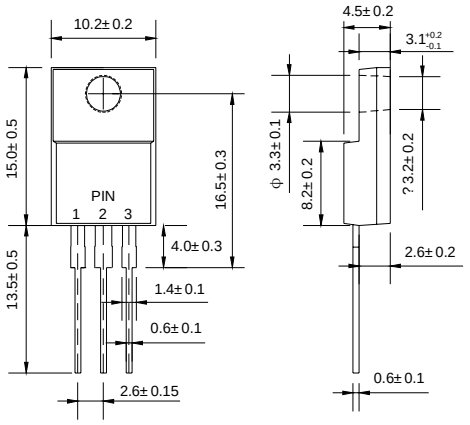
FEATURES

- ◇ 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 ITO-220AB,molded plastic body
- ◇ Terminals:Solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.06 ounce, 1.67 grams
- ◇ Position: Any

ITO-220AB



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

		MBRF2070CT	MBRF2080CT	MBRF2090CT	MBRF20100CT	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	70	80	90	100	V
Maximum working peak reverse voltage	V_{RWM}	49	56	63	70	V
Maximum DC blocking voltage	V_{DC}	70	80	90	100	V
Maximum average forward total device rectified current @ T_C = 133℃	$I_{F(AV)}$	20.0				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	150.0				A
Maximum forward voltage per leg (NOTE 1) (I_F=10A, T_C=25℃)	V_F	0.85				V
(I_F=10A, T_C=125℃)		0.70				
(I_F=20A, T_C=25℃)		0.95				
(I_F=20A, T_C=125℃)		0.85				
Maximum reverse current @T_A=25℃	I_R	0.1				mA
at rated DC blocking voltage @T_A=125℃		6.0				
Maximum junction capacitance (NOTE2)	C_T	400				pF
Operating junction temperature range	T_J	- 55 ---- + 150				℃
Storage temperature range	T_{STG}	- 55 ---- + 175				℃

NOTE: 1. Pulse test:300μs pulse width,1% duty cycle.
2. V_R=5V_{DC},(test signal range 100KHz to 1MHz

FIG.1 -- FORWARD CURRENT DERATING CURVE

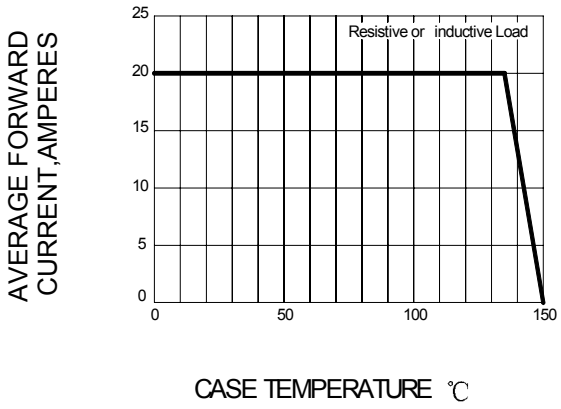


FIG.2 -- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

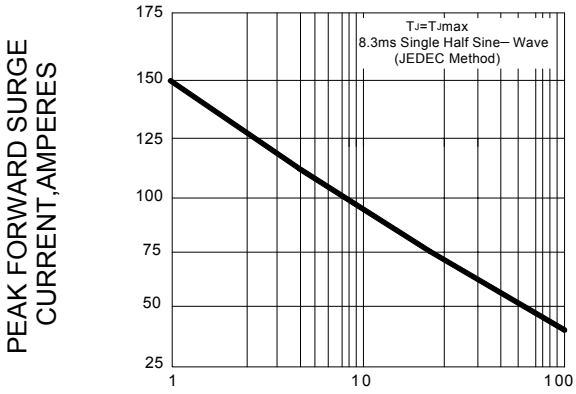


FIG.3 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

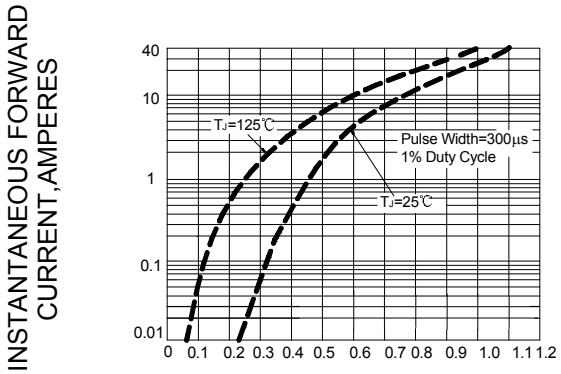


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS PER LEG

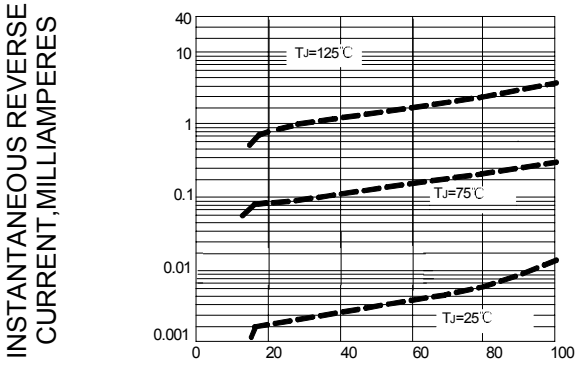


FIG.5--TYPICAL JUNCTION CAPACITANCE PER LEG