DUAL SCHOTTKY RECTIFIERS

VOLTAGE RANGE: 20 - 60 V
CURRENT: 10 A

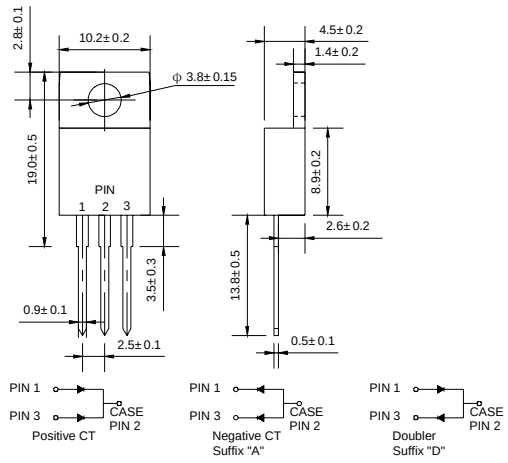
FEATURES

- ◇ 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-220AB,molded plastic body
- ◇ Terminals:Leads, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.071 ounce, 2.006 grams
- ◇ Position: Any

TO-220AB



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60Hz,resistive or inductive load.For capactive load,derate current by 20%.

		MBR 1020CT	MBR 1030CT	MBR 1035CT	MBR 1040CT	MBR 1045CT	MBR 1050CT	MBR 1060CT	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	35	40	45	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	25	28	32	35	42	V
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	50	60	V
Maximum average forw ard total device rectified current @T_C = 120°C	$I_{F(AV)}$	10							A
Peak forw ard surge current 8.3ms single half sine-w ave superimposed on rated load	I_{FSM}	125							A
Maximum forw ard voltage per leg (NOTE 1) (I_F=5.0A,T_C=125℃)	V_F	0.57					0.70		V
(I_F=5.0A,T_C=25℃)		0.70					0.80		
(I_F=10 A,T_C=25 ℃)		0.84					0.95		
Maximum reverse current @T_C=25℃	I_R	0.1							m A
at rated DC blocking voltage @T_C=125℃		15							
Maximum thermal resistance per leg	$R_{\theta JC}$	3.0							K/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. 2.0μs pulse width, f=1.0KH_Z
3. Thermal resistance from junction to case.

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FIG.1 -- FORWARD CURRENT DERATING CURVE

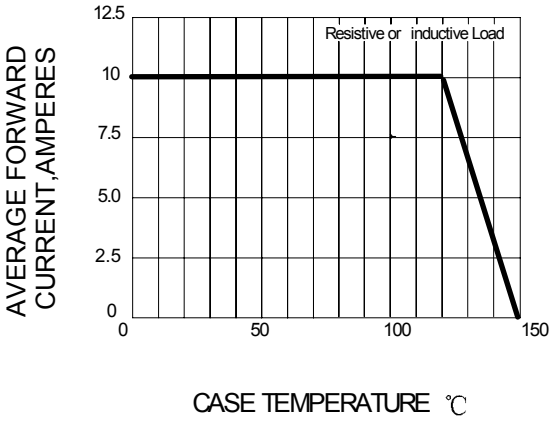

FIG.2 -- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

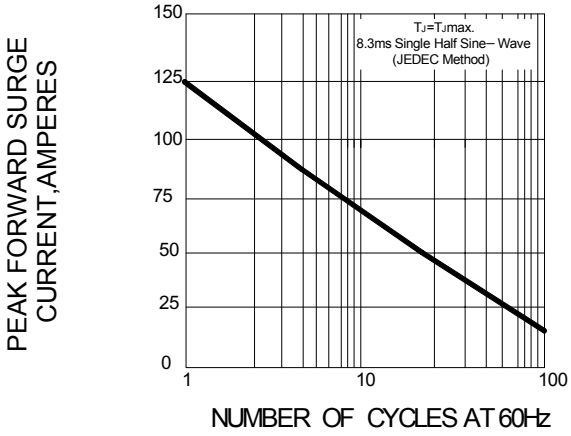

FIG.3 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PERLEG

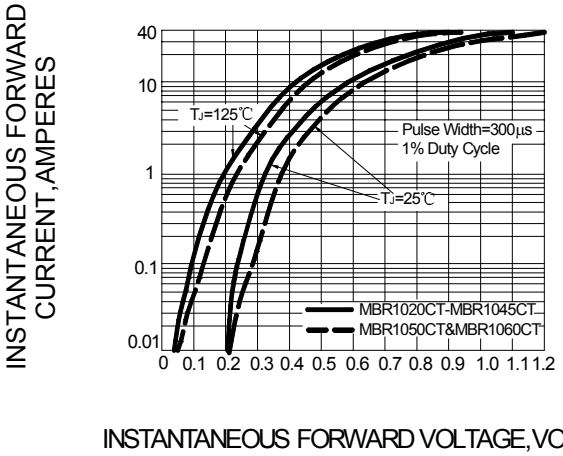

FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

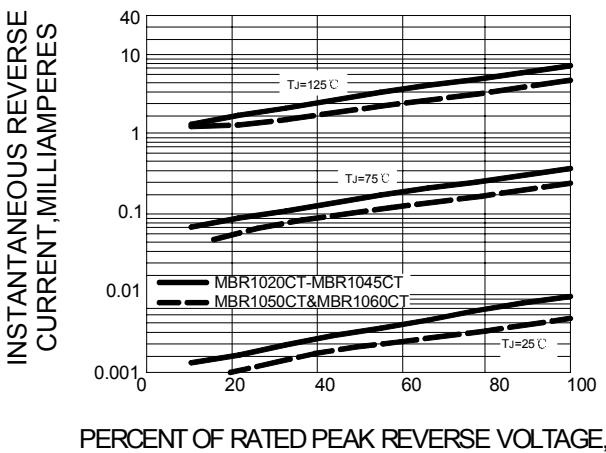

FIG.5–TYPICAL JUNCTION CAPACITANCE PERLEG

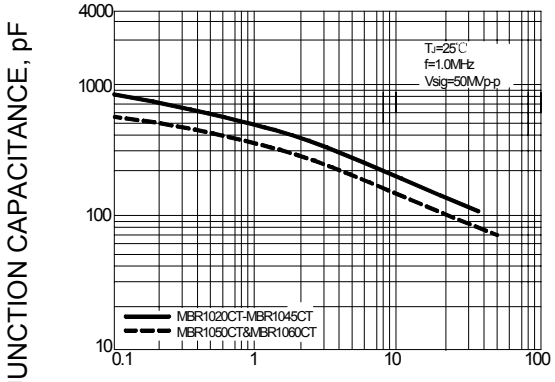

FIG.6–TYPICAL TRANSIENT THERMAL IMPEDANCE PERLEG