

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 30 to 60 Volts  
FORWARD CURRENT - 25 Amperes

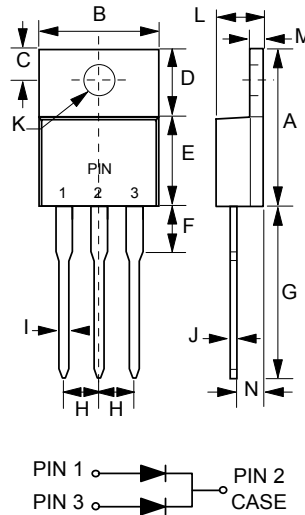
**FEATURES**

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free whelling, and polarity protection applications

**MECHANICAL DATA**

- Case : TO-220AB molded plastic
- Polarity : As marked on the body
- Weight : 0.08 ounces, 2.24 grams
- Mounting position : any
- Max. mounting torque = 0.5 N.m (5.1 Kgf.cm)

**TO-220AB**



TO-220AB		
DIM.	MIN.	MAX.
A	14.22	15.88
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	8.26	9.28
F	-	6.35
G	12.70	14.73
H	2.29	2.79
I	0.51	1.14
J	0.30	0.64
K	3.53 ∅	4.09 ∅
L	3.56	4.83
M	1.14	1.40
N	2.03	2.92

All Dimensions in millimeter

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	MBR 2530CT	MBR 2535CT	MBR 2540CT	MBR 2545CT	MBR 2550CT	MBR 2560CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	30	35	40	45	50	60	V
Maximum RMS Voltage	VRMS	21	24.5	28	31.5	35	42	V
Maximum DC Blocking Voltage	VDC	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current @Tc=130°C	I(AV)	25						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	IFSM	150						A
Maximum forward Voltage (per leg) at (Note 1)	VF	IF = 15A, @Tj=25°C IF = 15A, @Tj=125°C IF = 30A, @Tj=25°C IF = 30A, @Tj=125°C	- - 0.82 0.73				0.75 0.65 - -	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@Tj=25°C @Tj=125°C	0.2 40.0				1.0 50.0	mA
Voltage rate of change (Rated VR)	dv/dt	10,000						V/us
Typical Junction Capacitance per element (Note 2)	CJ	450						pF
Typical Thermal Resistance (Note 3)	RθJC	1.5						°C/W
Operating Temperature Range	TJ	-55 to +150						°C
Storage Temperature Range	TSTG	-55 to +175						°C

NOTES : 1. 300us Pulse Width, 2% Duty Cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Case.

REV. 3, Oct-2011, KTHC15

FIG.1 - FORWARD CURRENT DERATING CURVE

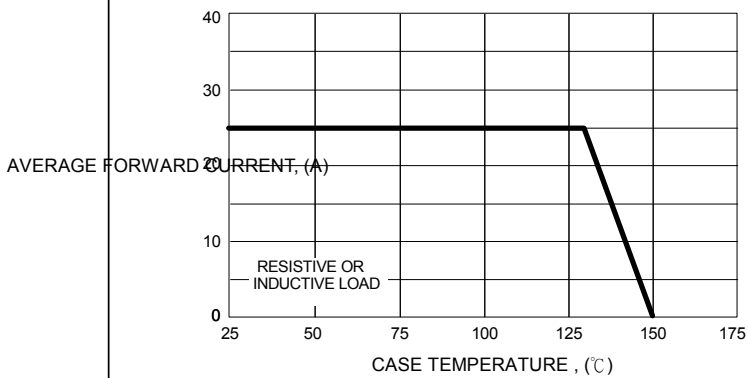


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

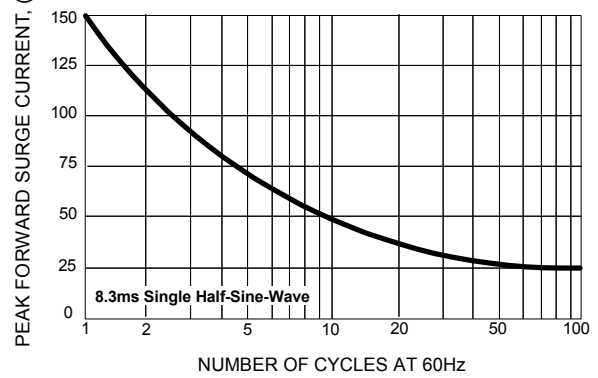


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

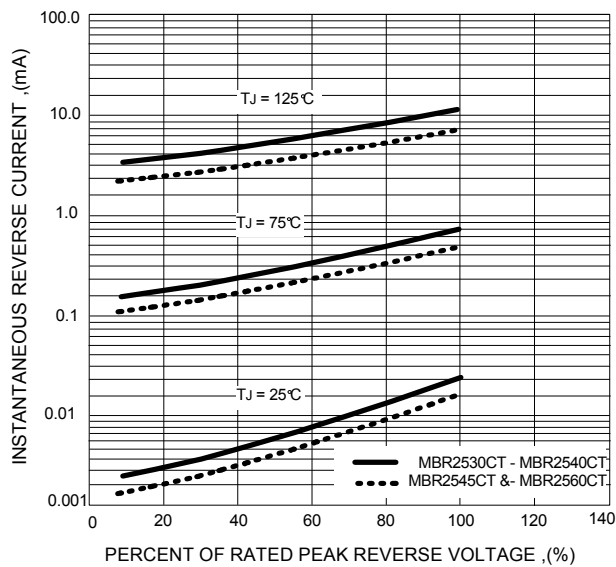


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

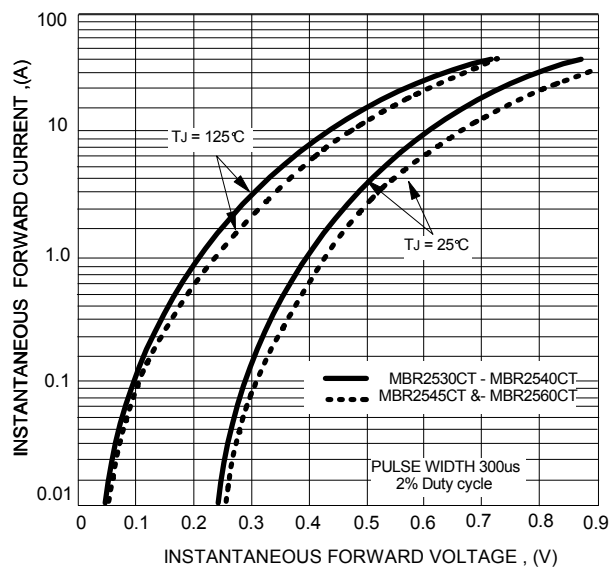
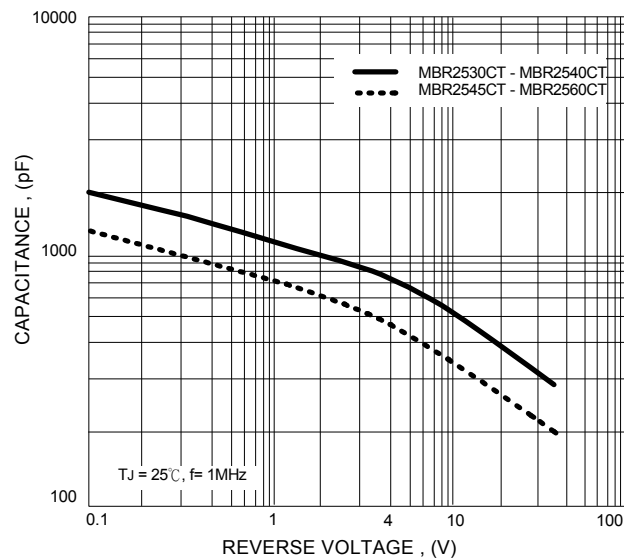


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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