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MBR1040CT - MBR10200CT SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 40 - 200 Volts
Io : 10 Ampere

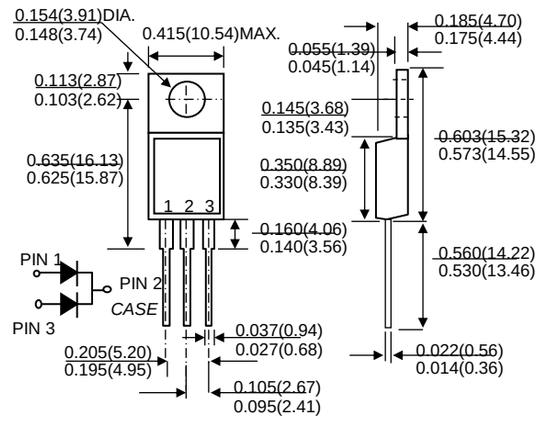
FEATURES :

* High surge forward current capability
* High efficiency
* High speed switching
* Low Power loss
* Pb / RoHS Free

MECHANICAL DATA :

* Case : Molded plastic
* Polarity: As marked
* Mounting Position: Any
* Weight : 1.9 grams (Approximately)

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	MBR 1040CT	MBR 1060CT	MBR 10100CT	MBR 10150CT	MBR 10200CT	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	40	60	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	10.0					A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at Ta = 25°C	I_{FSM}	100					A
Maximum Instantaneous Forward Voltage at I_F = 10 A	V_F	0.55	0.75	0.85	0.9	0.95	V
Maximum Reverse Current at T_J = 25 °C	I_R	0.1					mA
Rated DC Blocking Voltage T_J = 100 °C	$I_{R(H)}$	20					mA
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	2.0					°C/W
Operating Junction Temperature Range	T_J	-55 to + 150					°C
Storage Temperature Range	T_{STG}	-55 to + 150					°C

Note :

(1) Pulse test : 300 µs pluse width, 1% duty cycle

RATING AND CHARACTERISTIC CURVES (MBR1040CT - MBR10200CT)

FIG.1 - FORWARD CURRENT DERATING CURVE

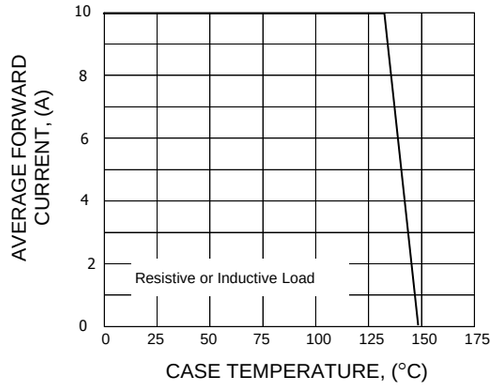


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

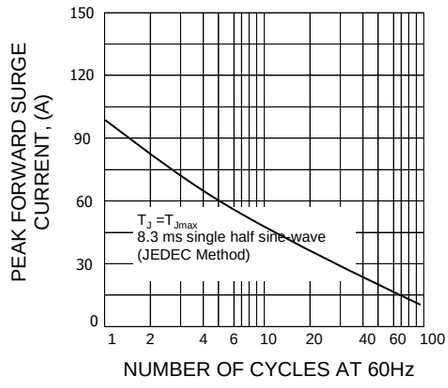


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

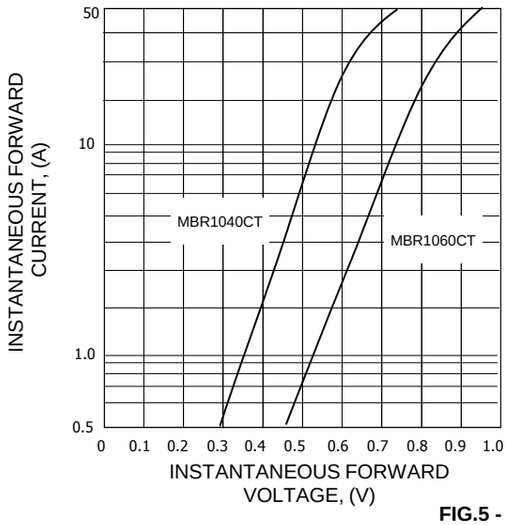


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

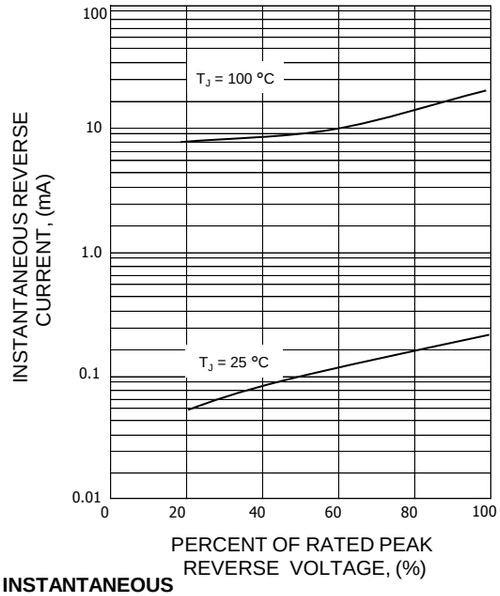


FIG.5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS