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MBR2040F - MBR20200F

SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 40 - 200 Volts
Io : 20 Ampere

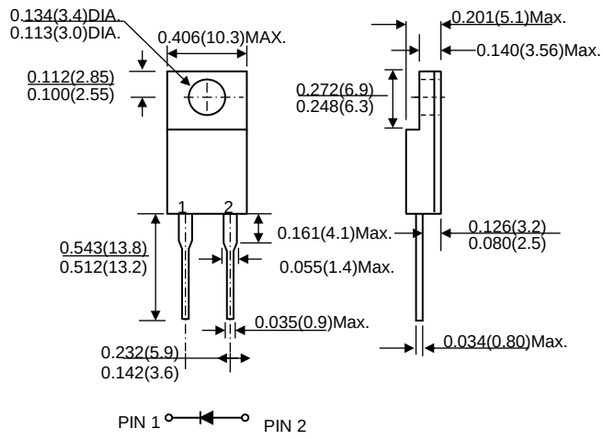
FEATURES :

* 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 : 1.5 grams (Approximately)

ITO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	MBR 2040F	MBR 2060F	MBR 20100F	MBR 20150F	MBR 20200F	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	40	60	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	20					A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at Ta = 25°C	I_{FSM}	200					A
Maximum Instantaneous Forward Voltage at I_F = 20 A	V_F	0.65	0.75	0.85	0.9	0.95	V
Maximum Reverse Current at T_J = 25 °C	I_R	0.2					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 (MBR2040F - MBR20200F)

FIG.1 - FORWARD CURRENT DERATING CURVE

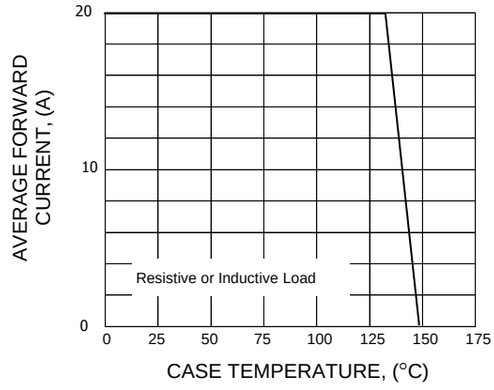


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

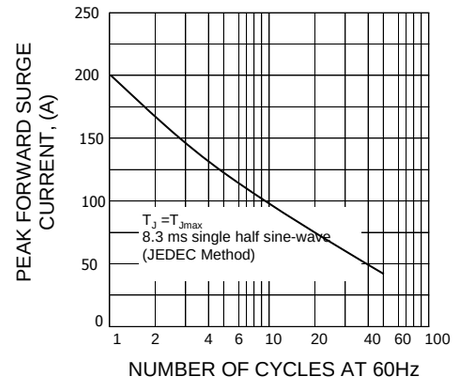


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

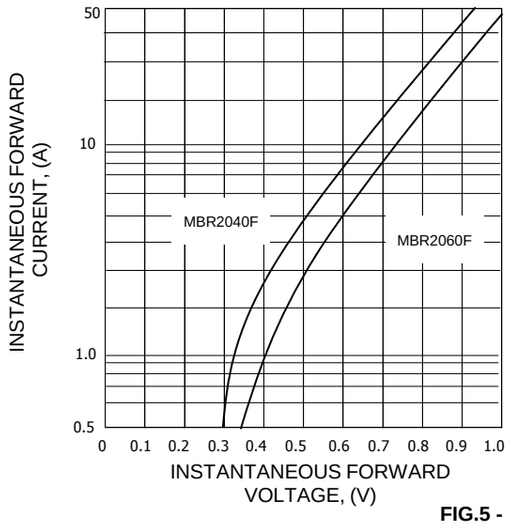


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

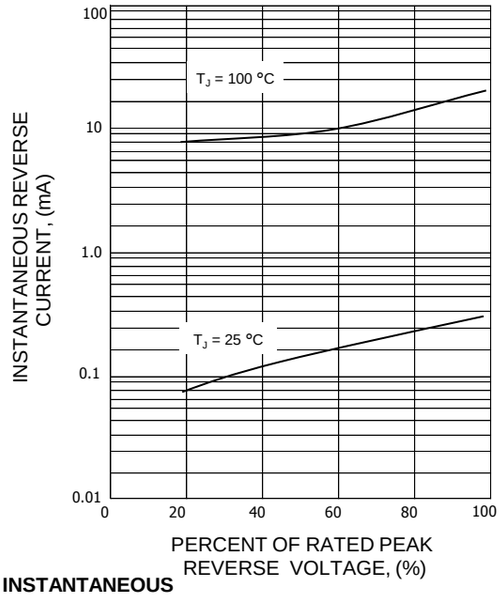


FIG.5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS