

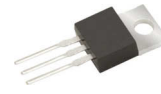


MBR30100CTSH

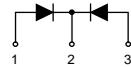
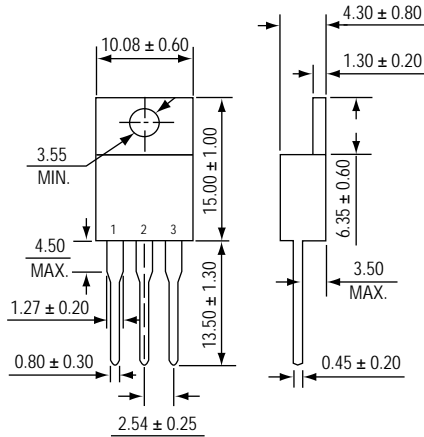
SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 100 Volts

Forward Current - 30 Amperes



TO-220AB



*Dimensions in millimeters

FEATURES

- * Halogen-free type
- * Compliance to RoHS product
- * Low power loss & high efficiency
- * High surge capability
- * 30 Amperes total (15 Amperes per diode leg)
- * High surge current capability
- * Epitaxial construction
- * Plastic Material-UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic body

Terminals : Plated Leads, solderable per MIL-STD-750, Method 2026

Polarity : Molded on body

Mounting Position : Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	MBR30100CTSH	UNITS
Maximum repetitive peak reverse voltage	VRRM	100	Volts
Maximum RMS voltage	VRMS	70	
Maximum DC blocking voltage	VDC	100	
Maximum average forward rectified current	I (AV)	30	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	275	Amps
Maximum instantaneous forward voltage @ I _F = 15 A	V _F	0.85 0.70	Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	0.01 15	mA
Typical junction capacitance (Note)	C _J	350	pF
Typical thermal resistance junction to case	R _{JC}	2.2	/ W
Operating junction temperature	T _J	150	
Storage temperature range	T _{STG}	-55 to +150	

Note : Measured at 1.0MHz and applied reverse voltage of 4.0V.

RATINGS AND CHARACTERISTIC CURVES OF MBR30100CTSH

FIG.1 - FORWARD CURRENT DERATING CURVE

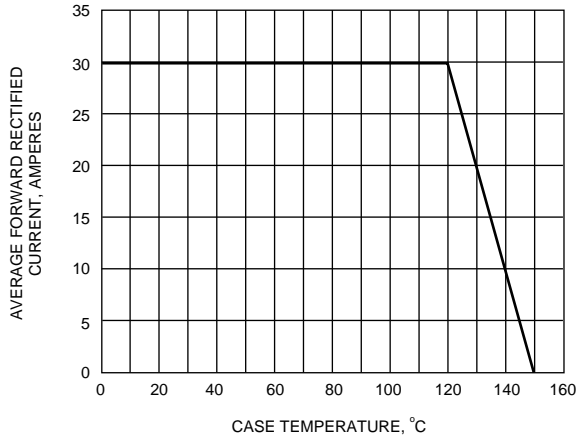


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

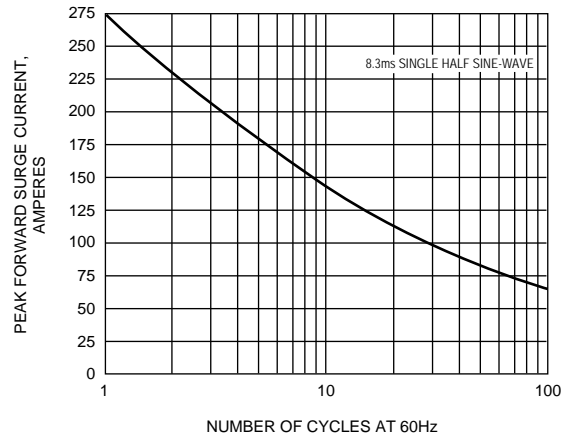


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

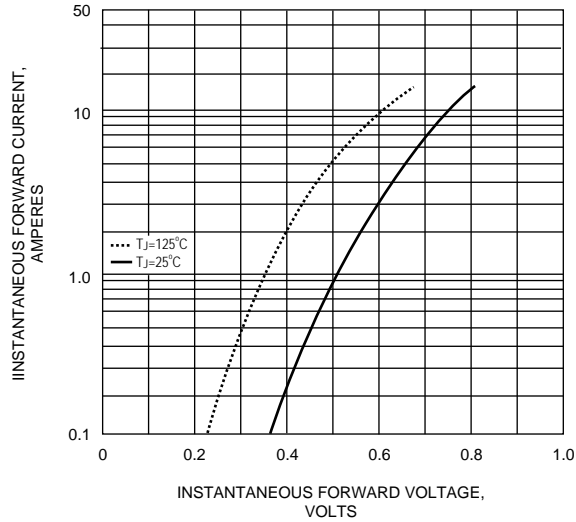


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

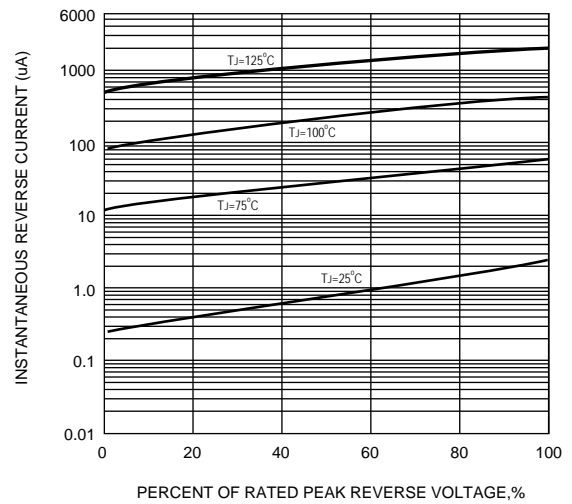


FIG.5 - TYPICAL JUNCTION CAPACITANCE

