

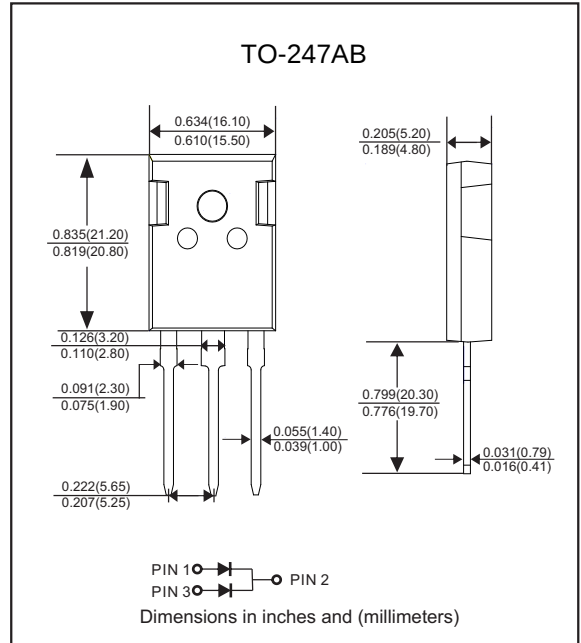
Features

- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- Compliant to Halogen-free

Mechanical data

- Case : TO-247AB
- Polarity : Polarity symbol marking on body
- Mounting Position : Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	per leg	I_O			40	A
	per device				80	
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			275	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^{\circ}\text{C}$	I_R		0.001	0.1	mA
	$V_R = V_{RRM}$ $T_A = 100^{\circ}\text{C}$			0.35	20	
Thermal resistance	Junction to case	$R_{\theta JC}$		0.4		$^{\circ}\text{C/W}$
Storage temperature		T_{STG}	-55		+175	$^{\circ}\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^{\circ}\text{C}$)
MBR80150PT	150	105	150	0.90	-55 to +175

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage
 $I_F = 40\text{ A}$

Rating and characteristic curves

FIG.1: Typical forward characteristics

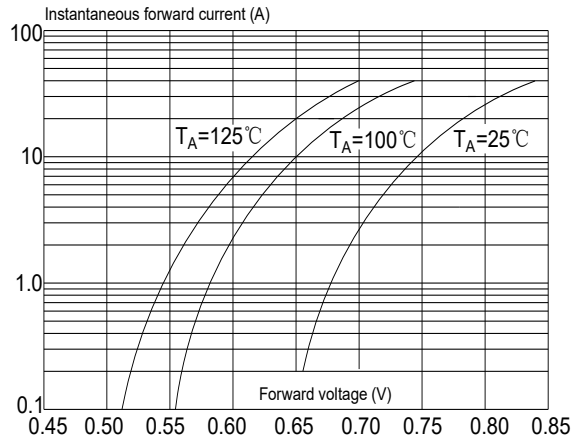


FIG.2: Typical reverse characteristics

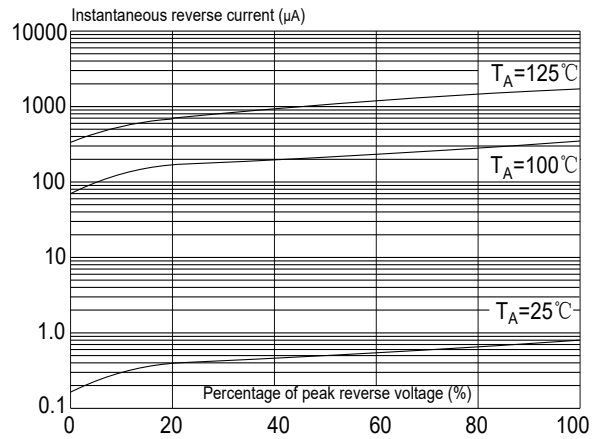


FIG.3: Maximum non-repetitive peak forward surge current

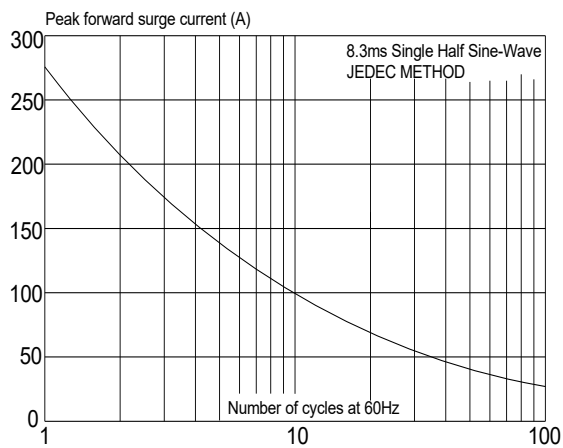
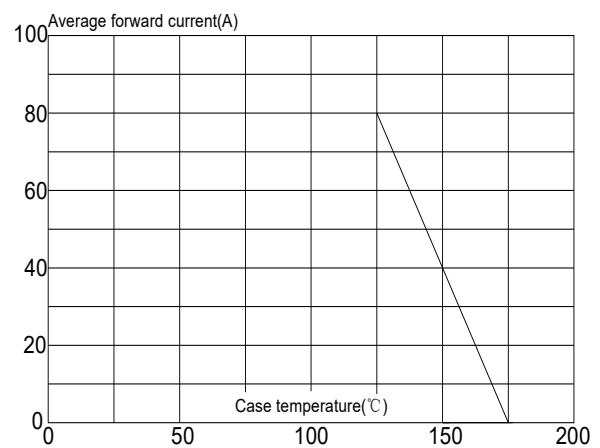
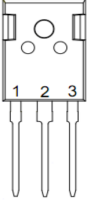
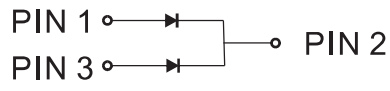


FIG.4: Forward current derating curve



Pinning information

Pin	Simplified outline	Symbol
Pin1 anode Pin2 cathode Pin3 anode		

Marking

Type number	Marking code
MBR80150PT	MBR80150PT