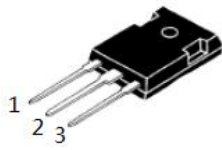
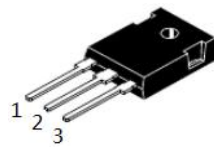
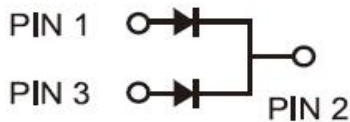


**MBR40150PT-B****SCHOTTKY BARRIER RECTIFIER**

TO-247/PT



TO-247S/PTS

**FEATURES**

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

**RoHS**
COMPLIANT**APPLICATIONS**

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

I_O	2*20A
V_{RRM}	150V
I_{FSM}	450A
V_F	0.71V
T_{jmax}	150°C
Assembly code	CP

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum, 10s per JESD 22-B106

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}	150	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current	I_O	20	A
		40	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	450	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V _F	Typ.	Max.	V
at I _F =5A	TA=25°C		0.70	-	
	TA=125°C		0.56	-	
at I _F =10A	TA=25°C		0.76	-	
	TA=125°C		0.63	-	
at I _F =20A	TA=25°C		0.83	0.88	
	TA=125°C		0.71	-	
Maximum Reverse Current at V _R =150V	TA=25°C	I _R	5	10	μA
	TA=125°C		3	-	mA

Note2:Pulse test: 300 μs pulse width, 1 % duty cycle



MBR40150PT-B

SCHOTTKY BARRIER RECTIFIER

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

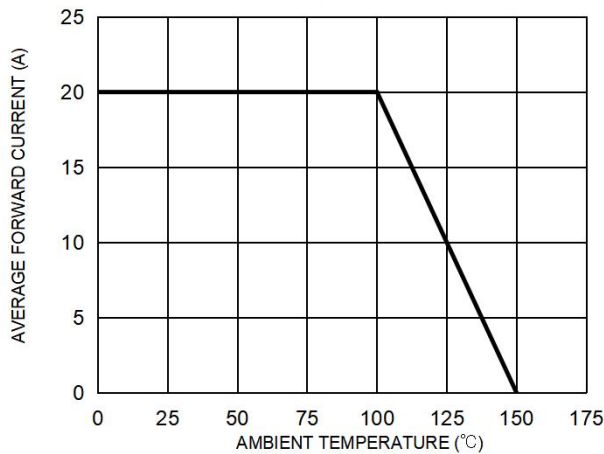


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

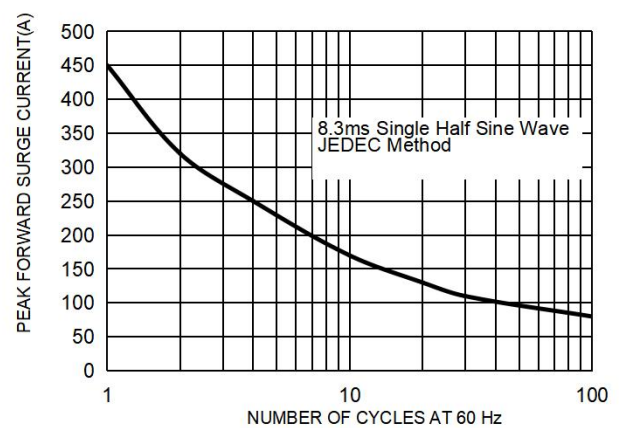


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

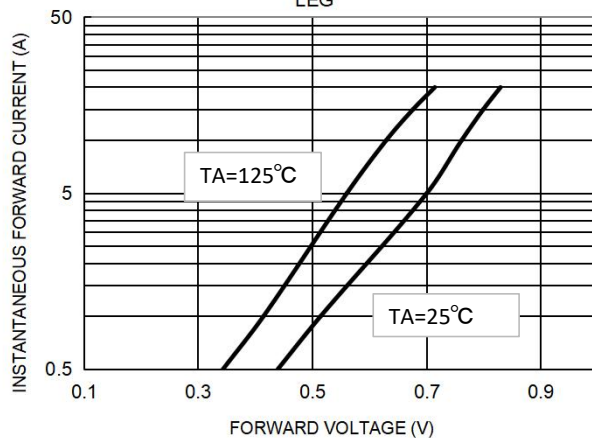
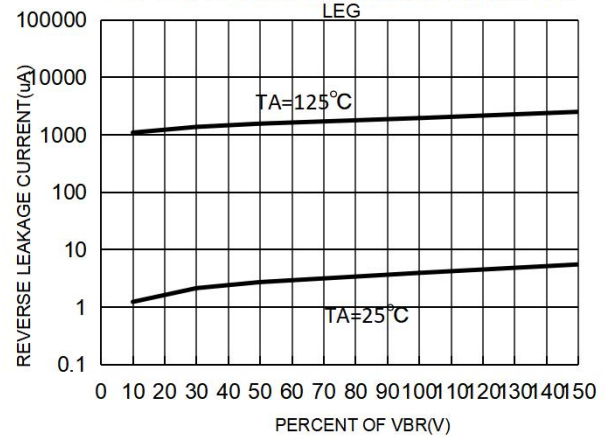


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



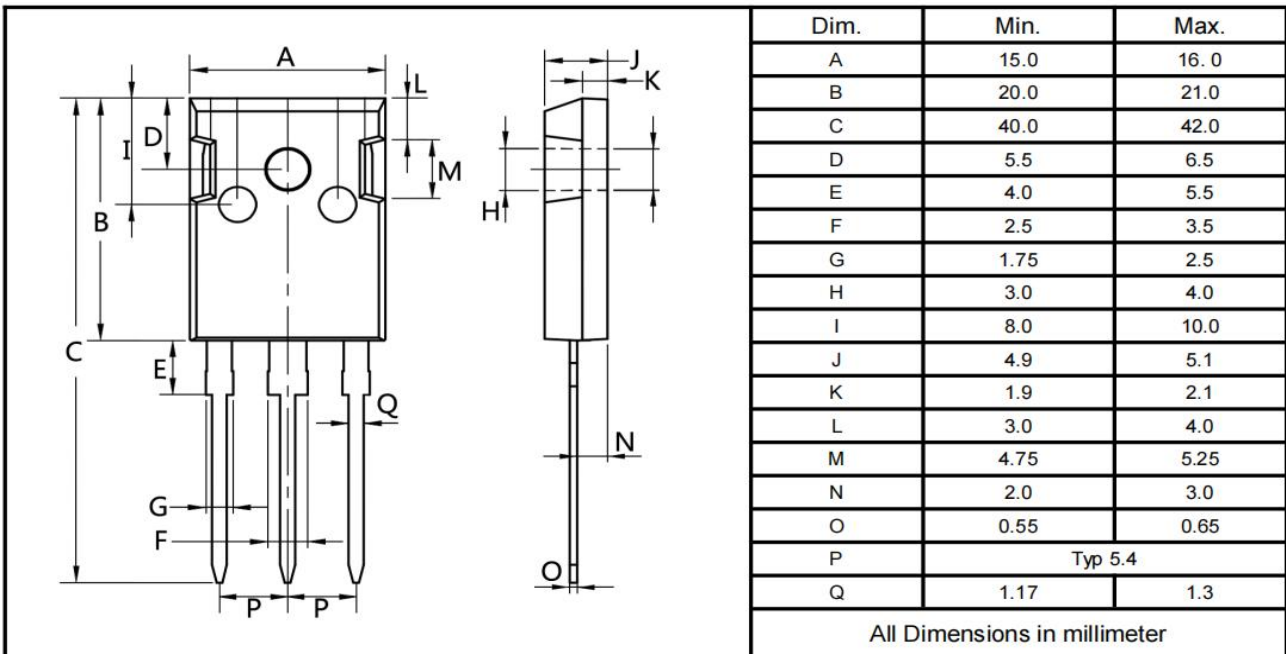


MBR40150PT-B

SCHOTTKY BARRIER RECTIFIER

Package Outline Dimensions millimeters

TO-247



TO-247S

