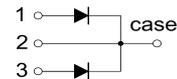
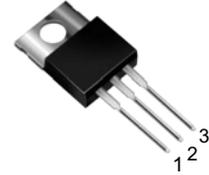


Schottky Barrier Rectifier Diodes in ITO-220AB

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



Mechanical Data

- **Case:** ITO-220AB (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Power switching application
- Hard switched and high frequency circuits
- Uninterruptible power supply

Maximum Ratings and Electrical Characteristics

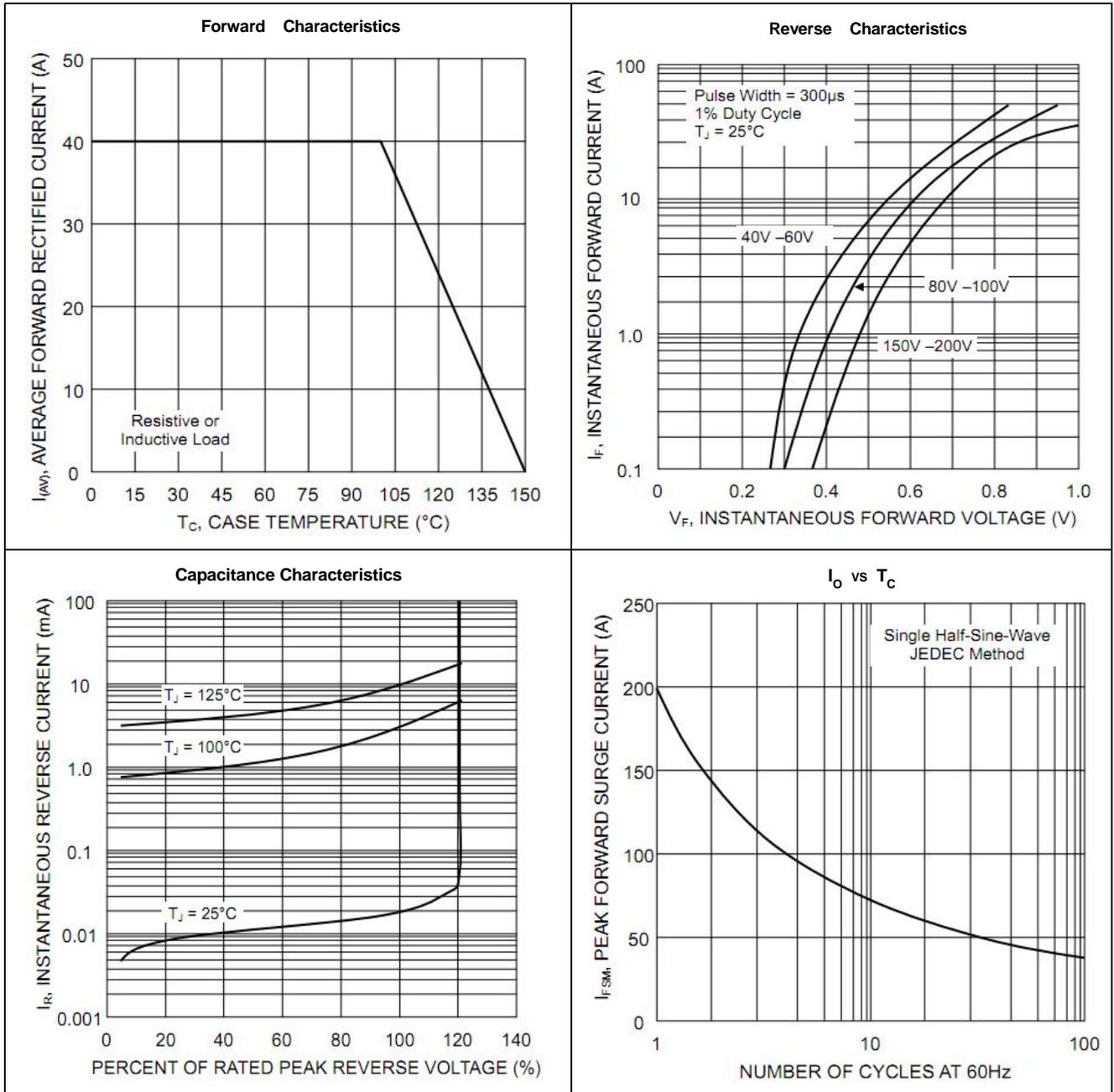
Ratings at 25 °C, ambient temperature unless otherwise specified

Characteristic	Symbol	MBR 4040CT	MBR 4045CT	MBR 4050CT	MBR 4060CT	MBR 4080CT	MBR 4090CT	MBR 40100CT	MBR 40150CT	MBR 40200CT	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V	
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	40									A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200									A	
Maximum Forward Voltage at 20A per leg	V_F	0.70		0.75		0.85			0.95		V	
Maximum DC Reverse Current at $T_J = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_J = 125^\circ\text{C}$	I_R	0.2 15					0.1 7.5					mA
Typical Thermal Resistance, Junction to Case	$R_{\theta JC}$	3									°C/W	
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150									°C	

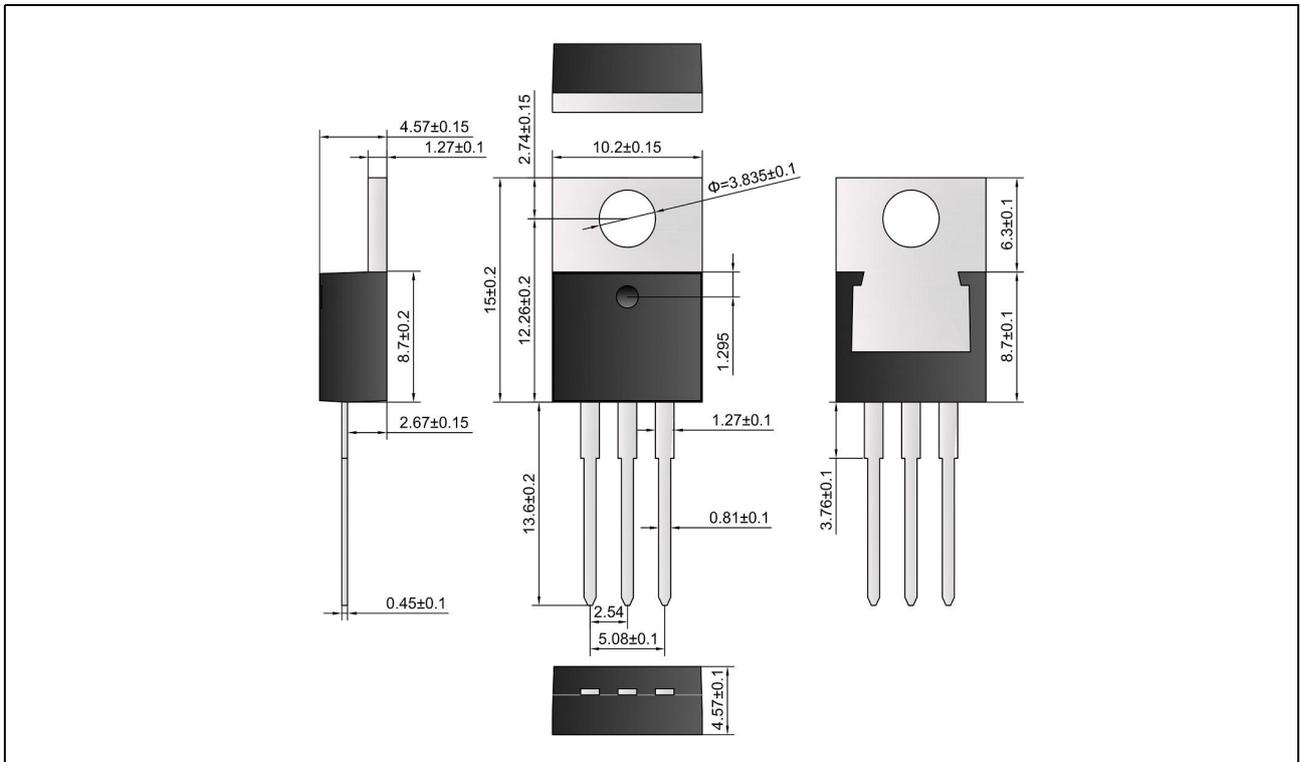
Note: (1) Mounted on 14mm X 14mm pad areas, 1oz. FR4 P.C.B
(2) Free air, mounted on recommended copper pad area

(3) Pulse test: 300us pulse width, 1% duty cycle
(4) Pulse test: Pulse width \leq 40ms

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
MBR40xxCT	ITO-220AB	TUBE	50pcs	EIA STD RS-481

Revision history

Date	Revision	Changes
1-Apr-2016	1.0	Initial release

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