

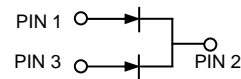
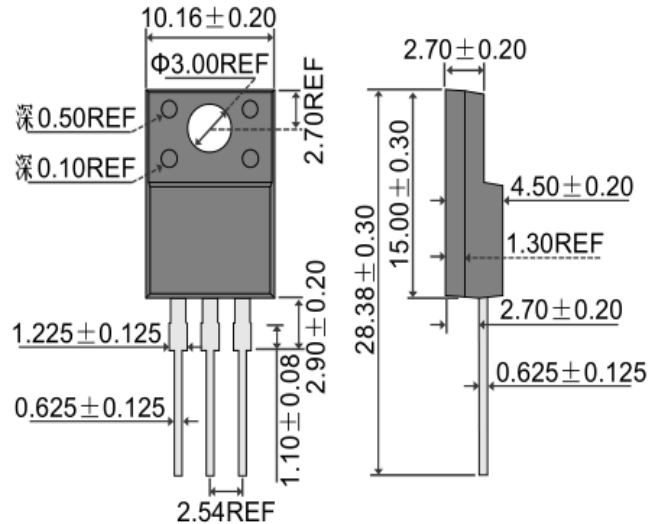
Features

- Power Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Current Capability
- Epoxy Meets UL 94V-0 Classification
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes

Mechanical Data

- Case: TO-220 F, Full Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 1.9 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 0.6 N.m Max.
- **Lead Free: For RoHS / Lead Free Version**

TO-220F

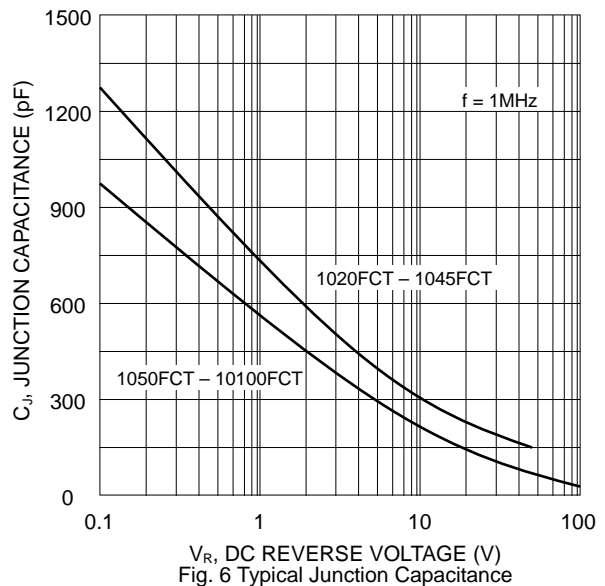
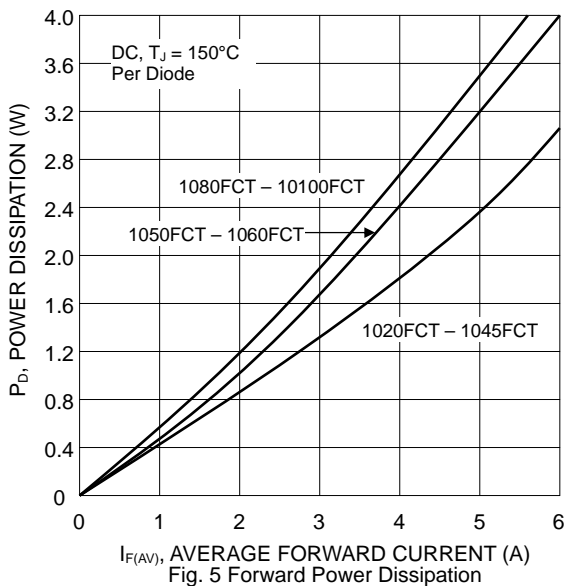
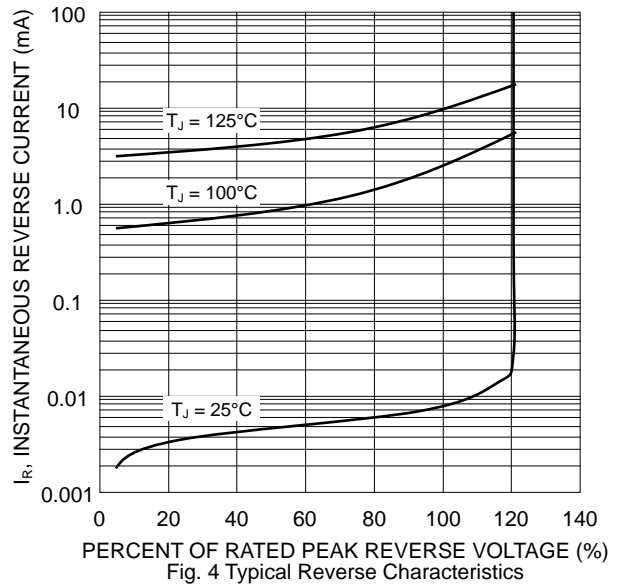
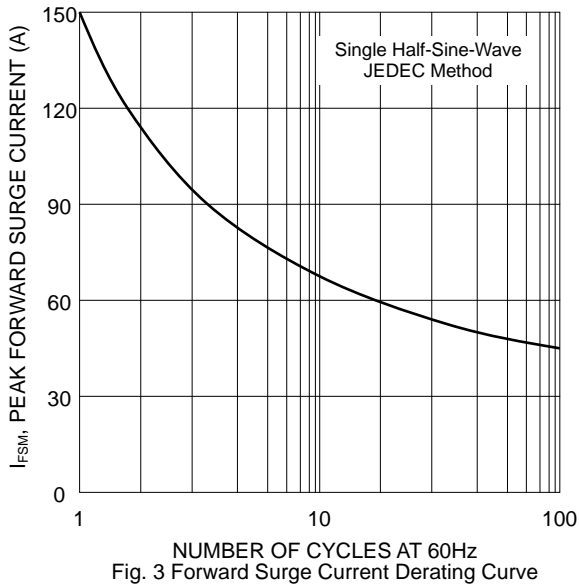
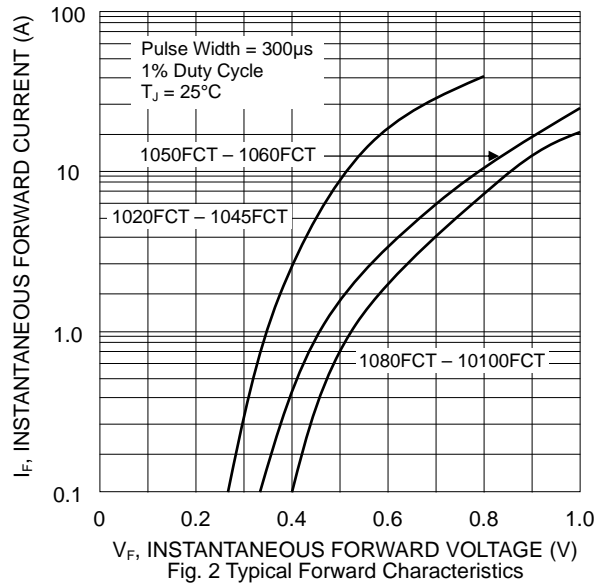
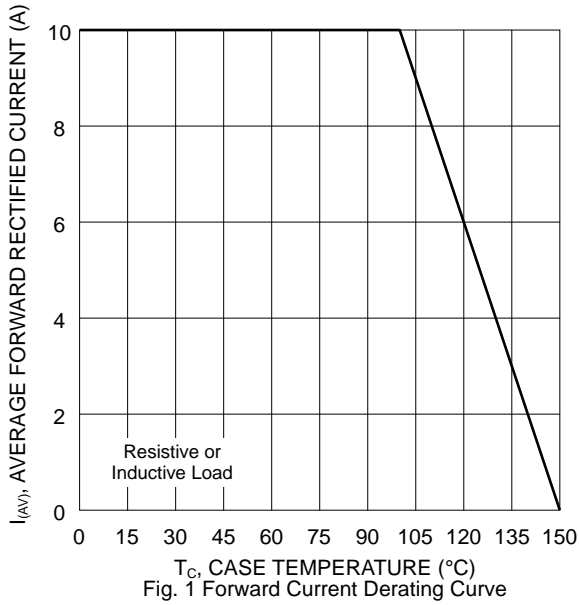


Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

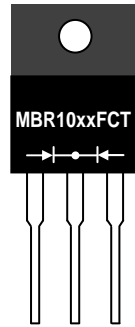
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR	Unit
		1020FCT	1030FCT	1040FCT	1045FCT	1050FCT	1060FCT	1080FCT	10100FCT	
Peak Repetitive Reverse Voltage	V_{RRM}									V
Working Peak Reverse Voltage	V_{RWM}	20	30	40	45	50	60	80	100	
DC Blocking Voltage	V_R									
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	32	35	42	56	70	V
Average Rectified Output Current @ $T_C = 100^\circ\text{C}$	I_O	10 5.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150								A
Forward Voltage per diode @ $I_F = 5.0\text{A}$	V_{FM}	0.55			0.75		0.85		V	
Peak Reverse Current At Rated DC Blocking Voltage	I_{RM}					0.2 20				mA
Typical Junction Capacitance (Note 1)	C_J	450			350					pF
Thermal Resistance Junction to Ambient per diode	R_{JA}					62				$^\circ\text{C/W}$
Thermal Resistance Junction to Case per diode	R_{JC}					4.0				
RMS Isolation Voltage, $t = 1\text{ min}$	V_{ISO}					1500				V
Operating and Storage Temperature Range	T_J, T_{STG}					-55 to +150				$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



MARKING INFORMATION



MBR10xxFCT= Device Number
 xx = 20, 30, 40, 45, 50, 60, 80 or 100
 Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
525 x 31 x 6	50	558 x 150 x 40	1,000	570 x 235 x 170	5,000	11.85

NOTICE

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Shanghai Leiditech Electronic Co.,Ltd
 Email: sale1@leiditech.com
 Tel : +86- 021 50828806
 Fax : +86- 021 50477059