

MBR30L45CT/FCT

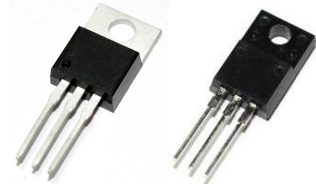
Low Trench Mos Barrier Schottky Rectifier

Voltage	45 Volts	Current	30 Amperes
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Features

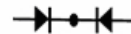
- Low Forward Voltage Drop
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability

DRAWING



TO-220AB

ITO-220AB



Mechanical Data

Case: TO-220AB, ITO-220AB
 Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
 Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
 Weight: TO-220AB – 1.85 grams (approximate)
 ITO-220AB – 1.65 grams (approximate)

Typical Applications

- Power Supply – Output Rectification
- Power Management
- Instrumentation

Maximum Ratings (Per Leg) ($T_A = +25^{\circ}\text{C}$, unless otherwise specified.)

Parameter	Symbol	MBR30L45CT/FCT	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Average Rectified Forward Current (Per Leg)	$I_F(AV)$	15	A
Rated VR) TC = 130°C (Per Device)		30	
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60 Hz)	I_{FSM}	150	A

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

Thermal Characteristics (Per Leg)

Parameter	Symbol	Value	Unit
Typical Thermal Resistance	$R_{\theta JC}$	2.2	$^{\circ}\text{C/W}$
		4.0	
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^{\circ}\text{C}$

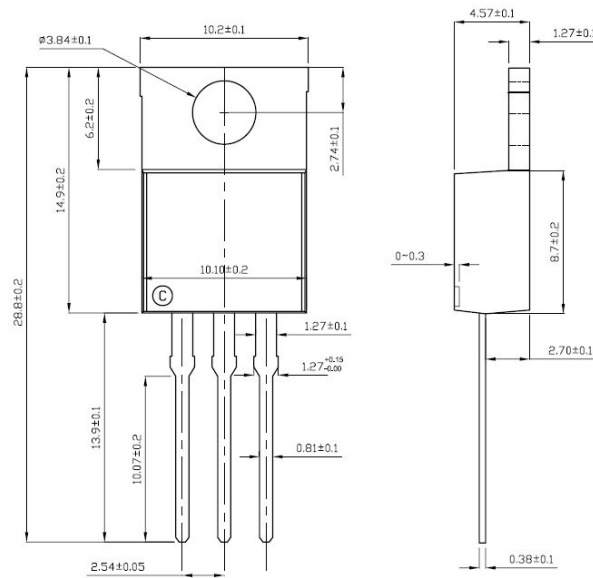
Electrical Characteristics (Per Leg) ($T_A = +25^\circ\text{C}$, unless otherwise specified.)

Parameter	Test conditions	Symbol	Min	Max	Unit
Breakdown Voltage	$I_R=500\mu\text{A}$	V_B	45		V
Forward Voltage Drop	$I_F=10\text{A}$	V_F		0.49	V
	$I_F=15\text{A}$			0.54	
Leakage Current (Note 1)	$V_R=45\text{V}$	I_R		300	μA

Notes: 1. Short duration pulse test used to minimize self-heating effect.

Mechanical Dimensions

TO-220AB



ITO-220AB

