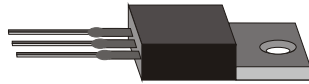
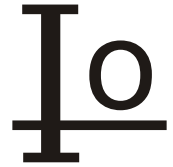


# MBR30L45CT

**LOW VF SCHOTTKY BARRIER RECTIFIERS**  
**VOLTAGE 45 Volts CURRENT 30.0 Amperes**



## FEATURES

- Low Forward Voltage Drop.
- Guard-Ring for Stress Protection.
- High Current Capability.
- Low Power Loss, High Efficiency.
- Lead Free Finish/RoHS Compliant

## MECHANICAL DATA

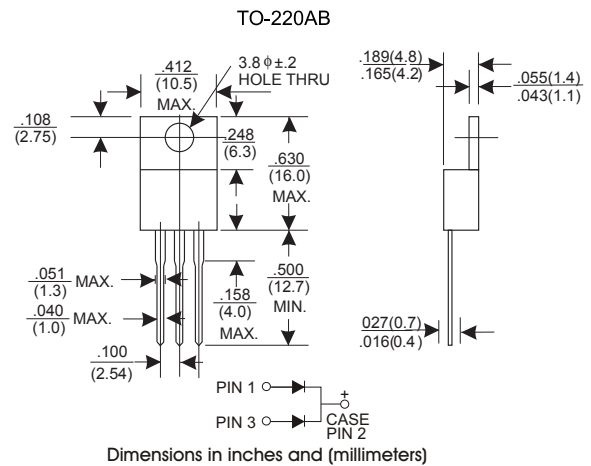
- Case: TO-220AB Molded Plastic
- Polarity: Symbols molded or marked on body
- Mounting position : Any

## VOLTAGE RANGE

45 Volts

## CURRENT

30.0 Ampere

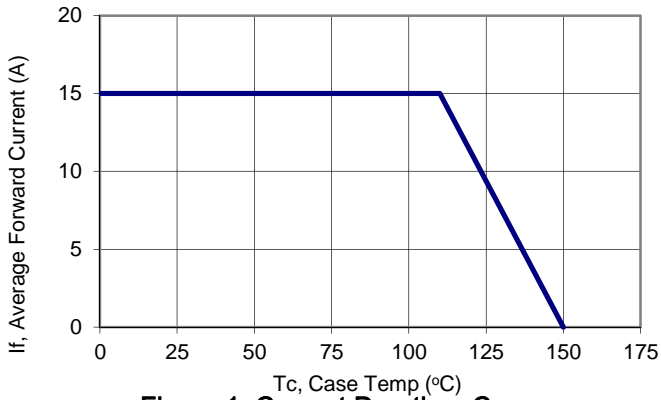


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

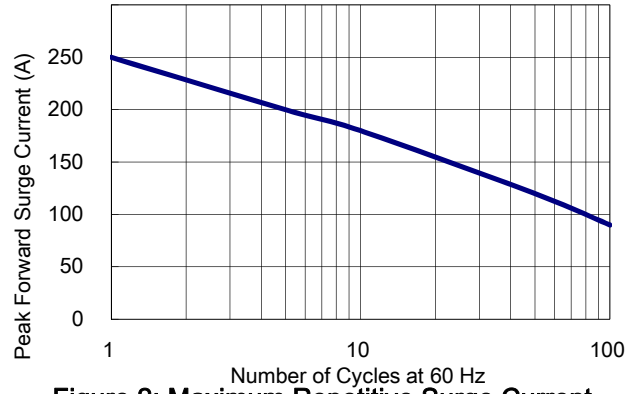
Ratings at 25°C ambient temperature unless otherwise specified.

Characteristic		Symobl	MBR30L45CT	Unit	
Peak Repetitive Reverse Voltage		VRRM			
Working Peak Reverse Voltage		VRWM	45	V	
DC Blocking Voltage		VR			
Maximum RMS Voltage		VRMS	31.5	V	
Maximum Average Forward Rectified Current		I (AV)	30	A	
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)		IFSM	250	A	
Maximum forward voltage	IF=15A	VF	T <sub>J</sub> = 25°C	0.52	V
			T <sub>J</sub> = 125°C	0.48	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TC=25°C	IR	0.5	MA	
	@TC=125°C		100		
Typical Thermal Resistance		ROJC	2.0	°C/W	
Operating Temperature Range		TJ	-65to+150	°C	
Storage Temperature Range		TSTG	-65to+150	°C	
Voltage Rate of Change (Rated V <sub>R</sub> )		dv/dt	10,000	V/μs	

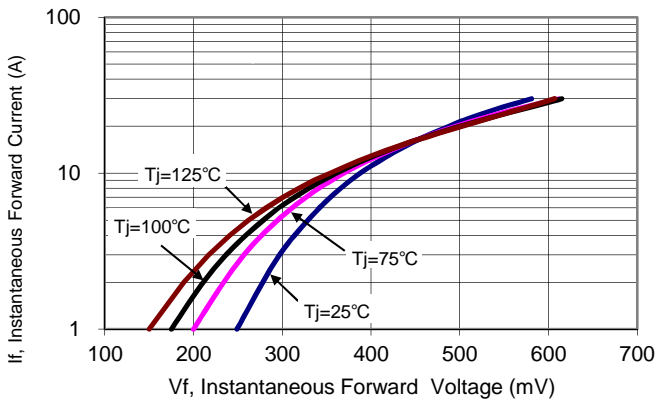
## RATING AND CHARACTERISTIC CURVES ( MBR30L45CT )



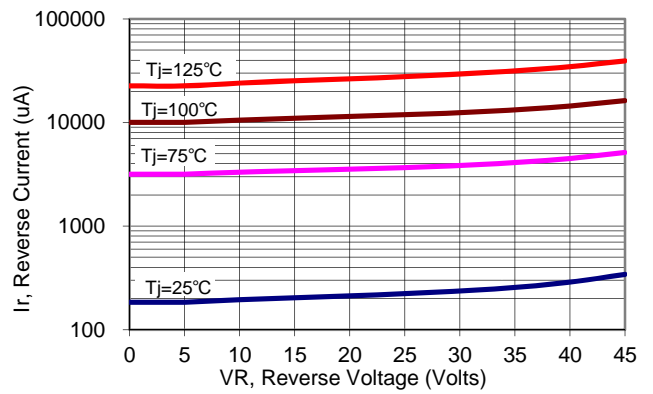
**Figure 1: Current Derating, Case**



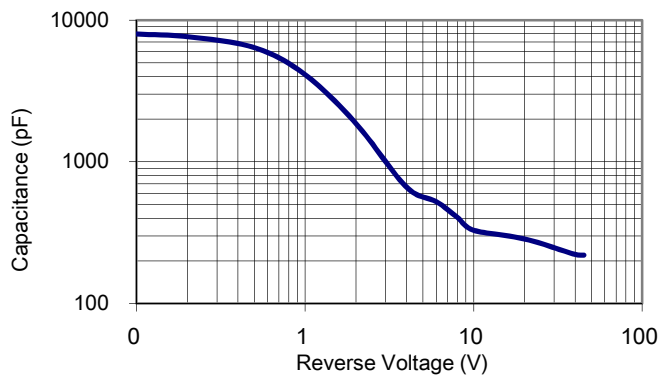
**Figure 2: Maximum Repetitive Surge Current**



**Figure 3: Typical Forward Voltage**



**Figure 4: Typical Reverse Current**



**Figure 5: Typical Junction Capacitance**