MBR25100CT

25 AMPS. Schottky Barrier Rectifiers

PIN 3 O-



Voltage Range 100 Volts Current 25.0 Amperes

Features

- Plastic material used carries Underwriters Laboratory Classifications 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 260°C/10 seconds,0.25"(6.35mm)from case

Mechanical Data

- Cases: JEDEC TO-220 molded plastic
- ÷ Terminals: Leads solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- ÷ Mounting position: Any
- Mounting torque: 5 in. lbs. max Weight: 0.08 ounce, 2.24 grams

TO-220 185(4.70) 055(1.40) 154(3.91) 27(6.86)

Dimensions in inches and (millimeters)

.105(2.67)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	MBR25100CT	Units
Maximum Recurrent Peak Reverse Voltage	100	V
Maximum RMS Voltage	70	V
Maximum DC Blocking Voltage	100	V
Maximum Average Forward Rectified Current at T _C =130°C	25	А
Peak Repetitive Forward Current (Rated V _R , Square Wave, 20KHz) at Tc=130°C	25	А
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	250	А
Peak Repetitive Reverse Surge Current (Note 1)	0.5	Α
Maximum Instantaneous Forward Voltage at (Note 2)		
I _F =12.5A, Tc=25°C I _F =12.5A, Tc=125°C I _F =25A, Tc=25°C I _F =25A, Tc=125°C	0.85 0.75 - -	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage @Tc=25°C (Note 2)	0.2	mA
Voltage Rate of Change, (Rated V _R)	1,000	V/uS
Maximum Thermal Resistance Per Leg (Note 3) R θ JC	1.5	€\M
Operating Junction Temperature Range T _J	-65 to +150	ဗ
Storage Temperature Range TSTG	-65 to +175	ဗ

- Notes: 1. 2.0us Pulse Width, f=1.0 KHz
 - 2. Pulse Test: 300us Pulse Width, 1% Duty Cycle
 - 3. Thermal Resistance from Junction to Case Per Leg.



