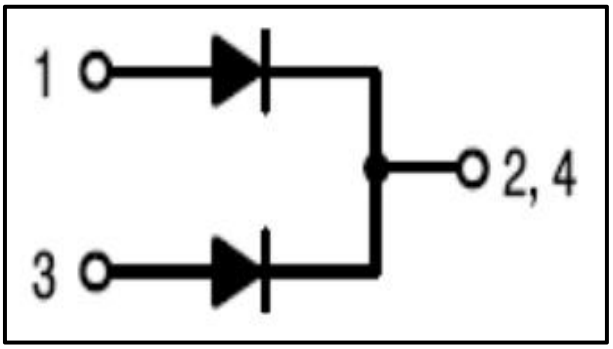
MBR20100CT Dual schottky barrier diodes

QUICK REFERENCE DATA
VR = 100 V
IF(AV) = 20 A
VF ≤ 0.8V

MECHANICALDATA :

- Case: TO-252/251 molded plastic
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.0655 ounces, 1.859 grams
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026

SYMBOL :

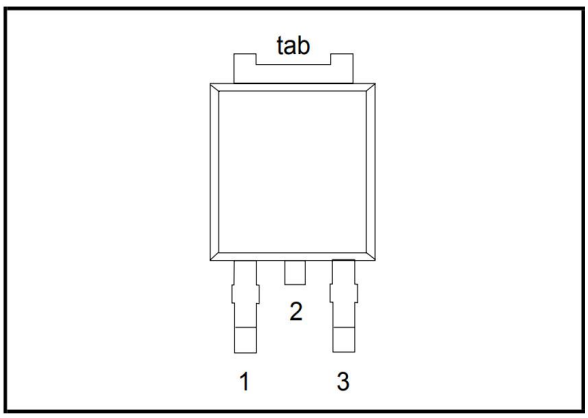


FEATURES :

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Flame Retardant Epoxy Molding Compound
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability
- Guardring for overvlotage protection
- In compliance with EU RoHS 2002/95/EC directives
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.

PINNING:

PIN	DESCRIPTION
1	anode 1
2	cathode 1
3	anode 2
tab	cathode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%

Parameter	Symbol	Test Condition	MIN	TYP	Max	Unit
Peak Repetitive Reverse Voltage	**VRRM**				100	V
Maxi mum RMS Voltage	**VRMS**				70	V
Maximum DC Blocking Voltage	**VR(DC)**				100	V
Average Rectified Forward Current	**IF(AV)**				20	A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	**IFSM**				200	A
Maximum Forward Voltage at 10A,per leg	**VF**				0.8	V
Maximum DC Reverse Current T=25℃	**IR**			0.05	0.1	mA
at Rated DC Blocking Voltage T=125℃					20	mA
Voltage Rate of Change (Rated VR)	**dv/dt**				10,000	v/μs
Typical Thermal Resistance	**RθJC**				2	℃/W
Operating junction temperature	**Tj**		-65		175	℃
Storage temperature	**Tstg**		-65		175	℃

Notes :

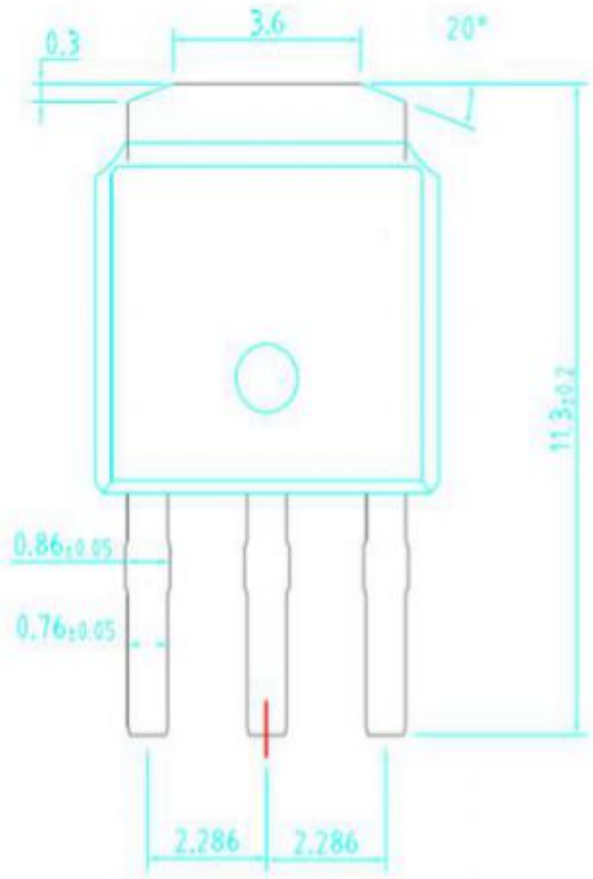
1.Both Bonding and Chip structure are available.

2.Pulse Test: Pulse Width = 300 ms, Duty Cycle ≤2.0%

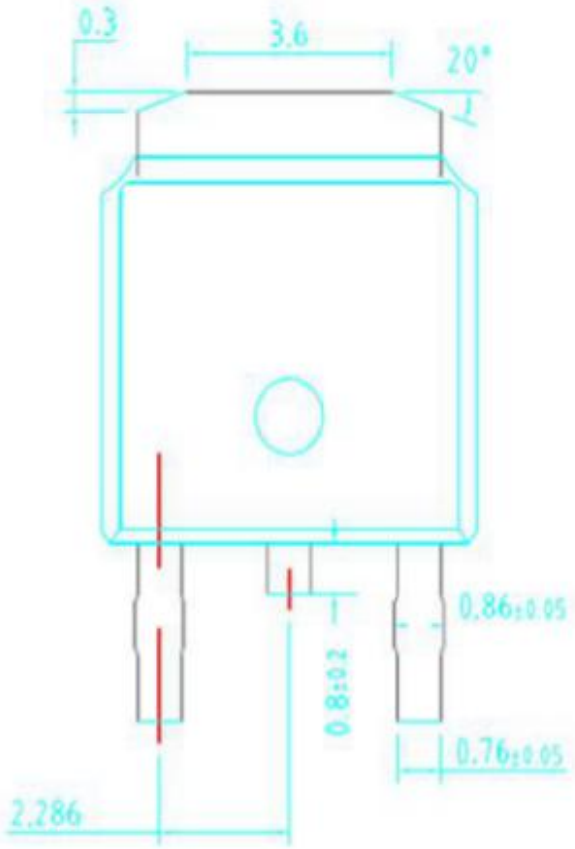
3.The heat generated must be less than the thermal conductivity from Junction−to−Ambient: dPD/dTJ < 1/RqJA.

TYPICAL ELEC TRICAL AND THERMAL CHARACTERISTICS

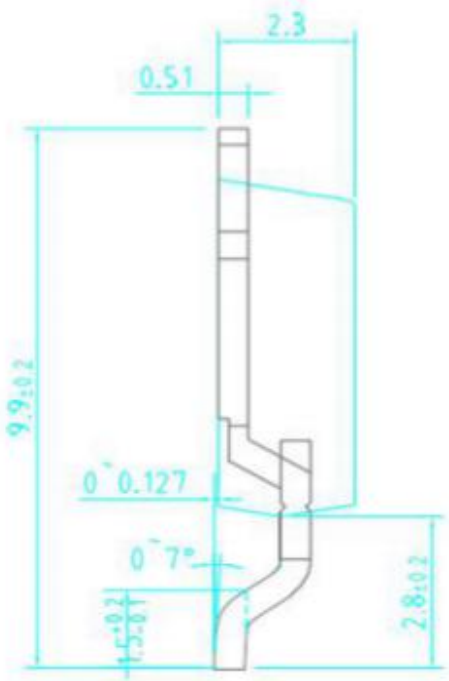
TO-251



TO-252



侧面：



RATING AND CHARACTERISTIC CURVES

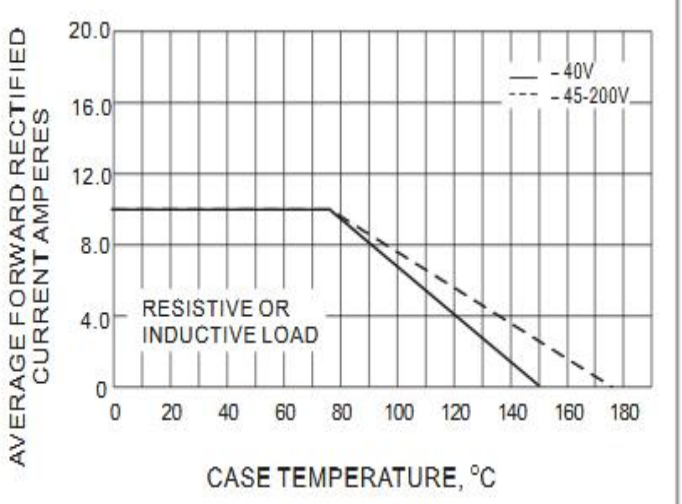


Fig.1- FORWARD CURRENT DERATING CURVE

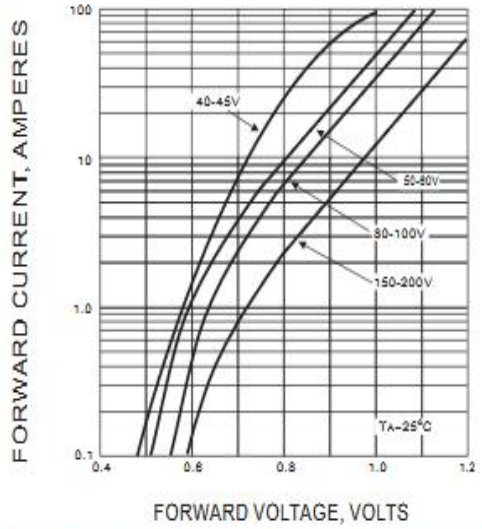


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

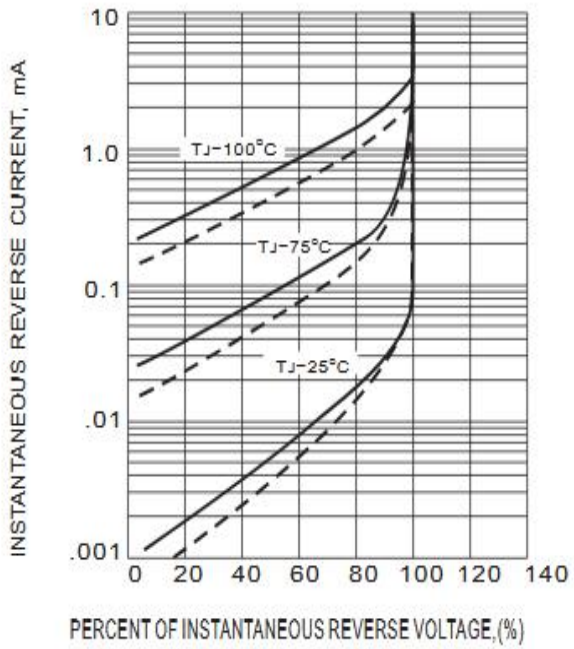


Fig.3- TYPICAL REVERSE CHARACTERISTICS

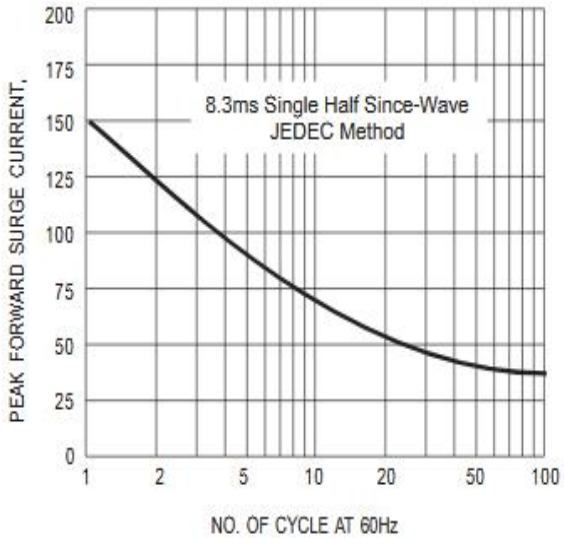


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS