



SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 100 V

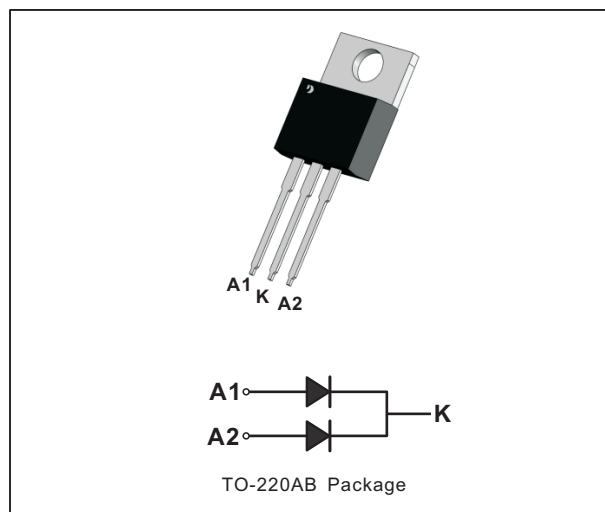
Forward Current - 20 A

FEATURES

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any

Mechanical data

- Case: TO-220AB
- Approx. Weight: 1.9g (0.067oz)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

CHARACTERISTICS	SYMBOL	MBRT20100CD	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current per leg per device	$I_{F(AV)}$	10 20	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	230	A
Max Instantaneous Forward Voltage at 10 A Per leg	V_F	0.64	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 125^\circ\text{C}$	I_R	0.2 50	mA
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	45	°C/W
Typical Junction Capacitance ⁽²⁾	C_j	1200	pF
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

(1) P.C.B. mounted with 10cmX10cmX1mm copper pad areas.

(2) Measured at 1 MHz and applied reverse voltage of 4 V D.C



Fig.1 Typical Forward Current Derating Curve

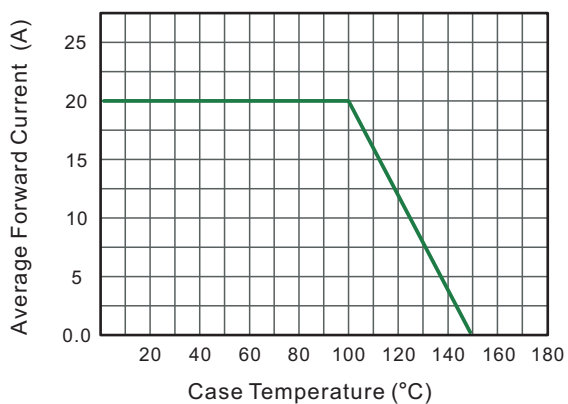


Fig.2 Typical Reverse Characteristics

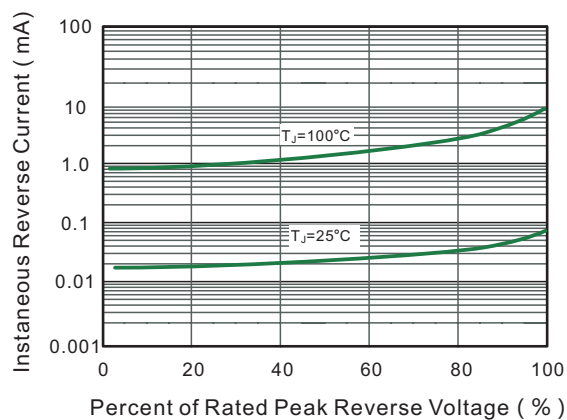


Fig.3 Typical Forward Characteristic(per leg)

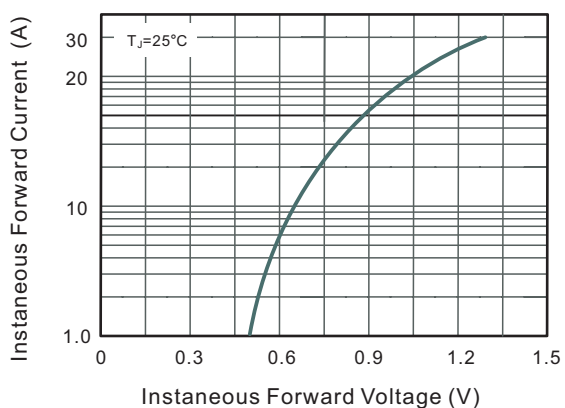


Fig.4 Typical Junction Capacitance

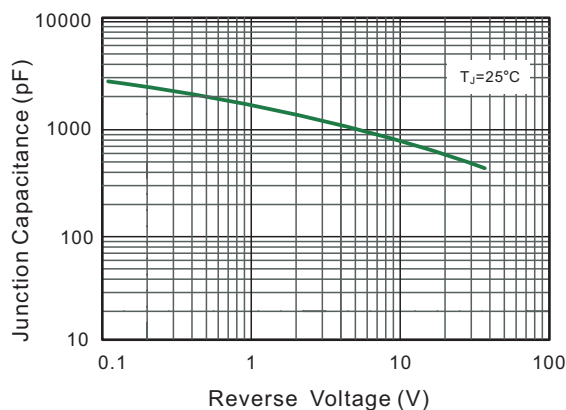


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

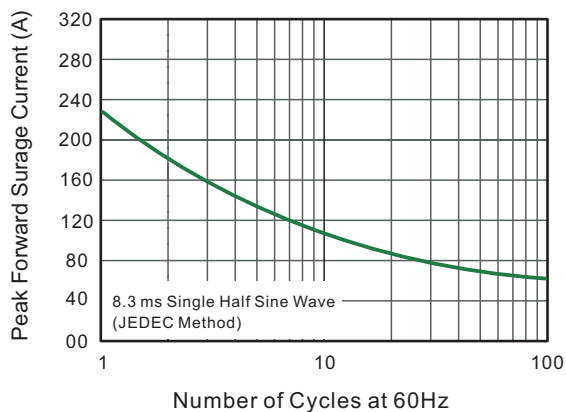
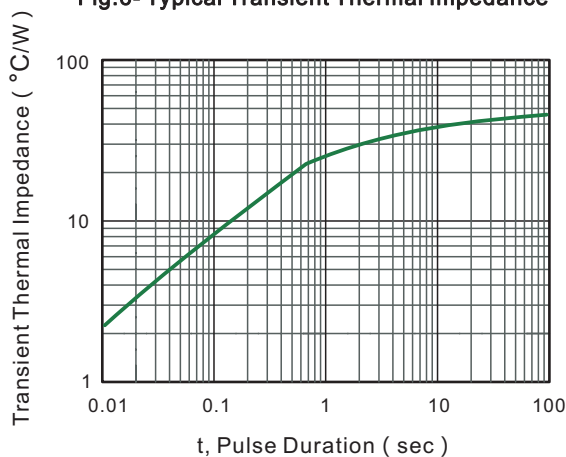


Fig.6- Typical Transient Thermal Impedance

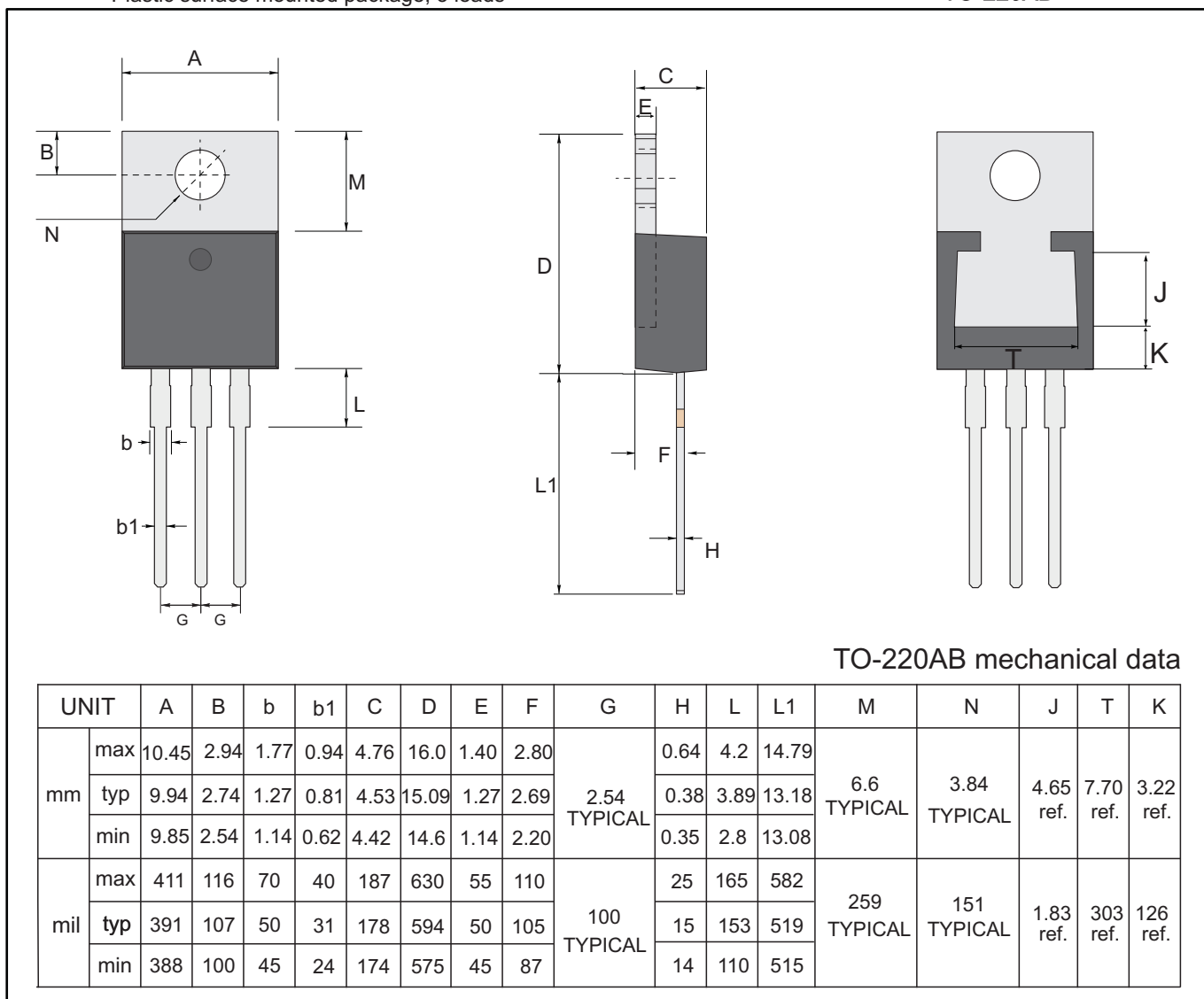




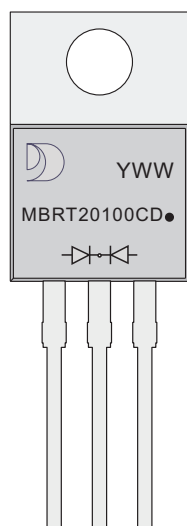
PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

TO-220AB



MARKING DIAGRAM



YWW: Date Code
Y: Years(0~9)
WW: Week
MBRT20100CD: Product name
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



Important Notice and Disclaimer

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, not does Jingdao Microelectronics assume any liability for application assistance or customer product design.

Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.