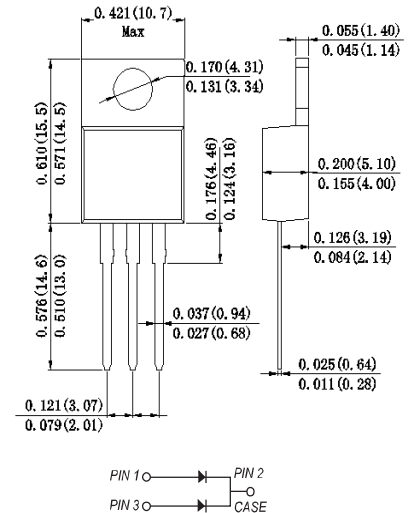


Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
260°C/10 seconds at terminals

TO-220AB



Mechanical Data

Case : Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Maximum Ratings (Ta=25 unless otherwise specified)

PARAMETER	SYMBOLS	MBR20100CT-G1-CN	UNITS
Maximum repetitive 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 at $T_c=110^{\circ}\text{C}$	$I_{(AV)}$	20.0 10.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250.0	A
Typical thermal resistance	R_{qJC}	2.0	/W
Operating junction temperature range	T_J	-55 to +150	
Storage temperature range	T_{STG}	-55 to +150	

Electrical Characteristics (Ta=25 unless otherwise specified)

PARAMETER	SYMBOLS	TYPE	MAX	UNITS
Maximum instantaneous forward voltage per diode at 10.0A per diode at 15.0A	V_F	0.76 0.84	- 0.88	V
Maximum DC reverse current at rated DC blocking voltage	I_R	0.6 1	20 20	μA mA

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

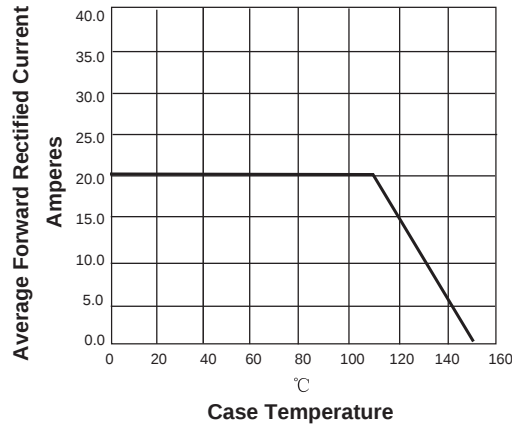


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

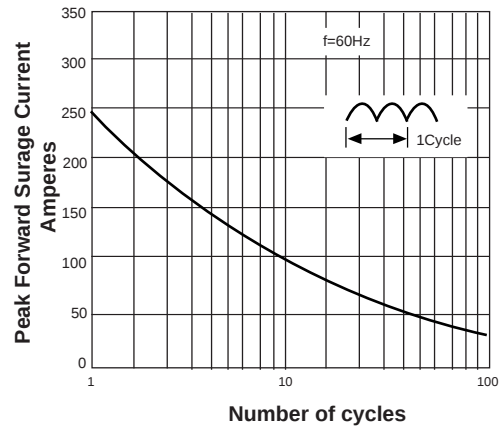


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

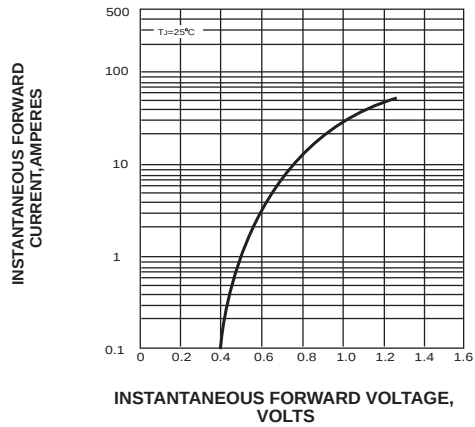
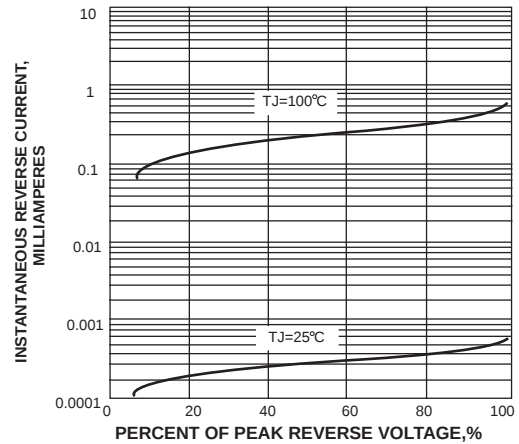
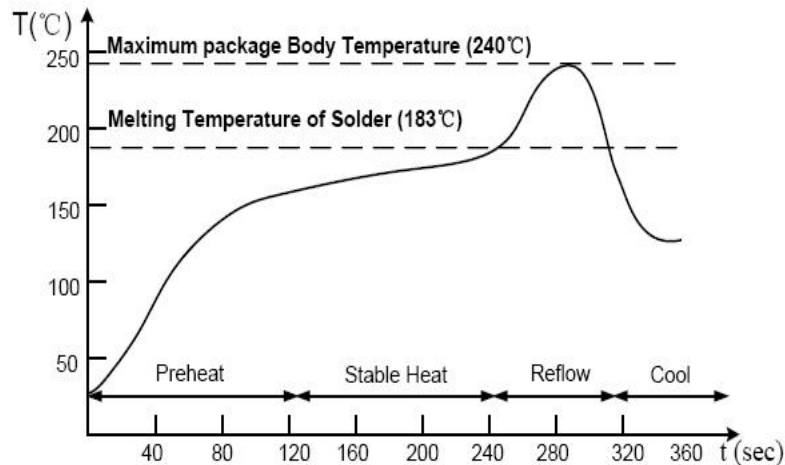


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Suggested Soldering Temperature Profile



Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Package Information

Tube Package

Package	Tube (mm)	Q'TY/Tube (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
TO-220AB	525*31.9*6.4	0.05	545*150*45	1.0	575*245*170	5.0

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