ASBMBR3040~30100LCTUX0

30.0Amp Low VF Schottky Barrier Rectifiers

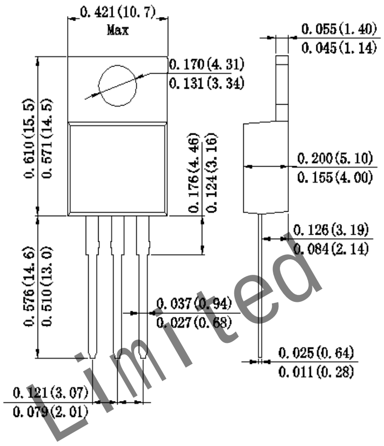
Features

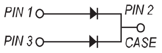
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low forward voltage drop
- High forward surge current capability
- High temperature soldering guaranteed 250℃/10 seconds at terminals

TO-220AB

RoHS COMPLIANT

Pb





Dimensions in inches and (millimeters)

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 And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	ASBMBR30 40LCTUX0	ASBMBR30 45LCTUX0	ASBMBR30 50LCTUX0	ASBMBR30 60LCTUX0	ASBMBR30 80LCTUX0	ASBMBR30 100LCTUX0	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	40	45	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	28	31.5	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	40	45	50	60	80	100	V
Maximum average forward rectified current at T_C=110℃ per device per diode	$I_{(AV)}$	30.0 15.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250.0						A
Maximum instantaneous forward voltage per diode at 15.0A	V_F	0.55			0.60	0.70		V
Maximum DC reverse current at rated DC blocking voltage T_A =25℃ T_A=125℃	I_R	0.5 50				0.1 10		mA
Typical thermal resistance	$R_{\theta JA}$	35.0						°C/W
Operating junction temperature range	T_J	-55 to +150						°C
Storage temperature range	T_{STG}	-55 to +150						°C

Ratings And Characteristic Curves

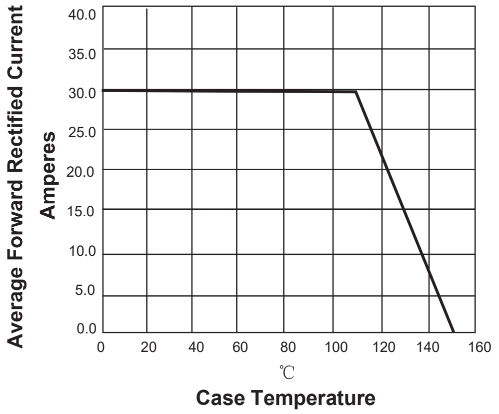


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

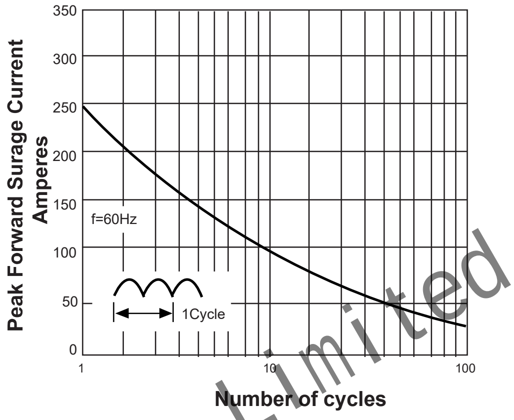


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

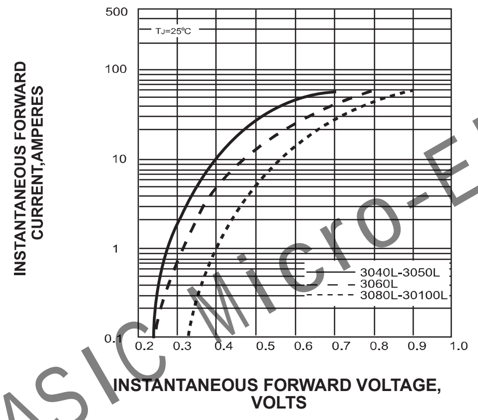


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

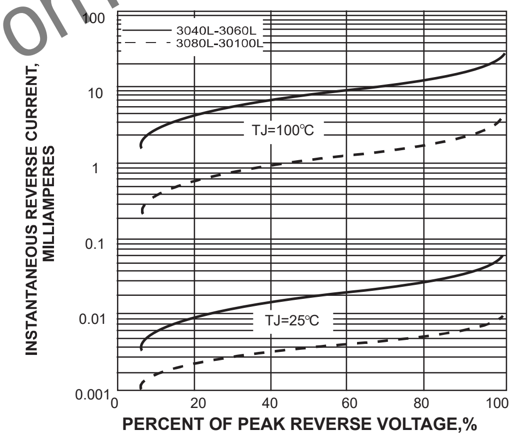
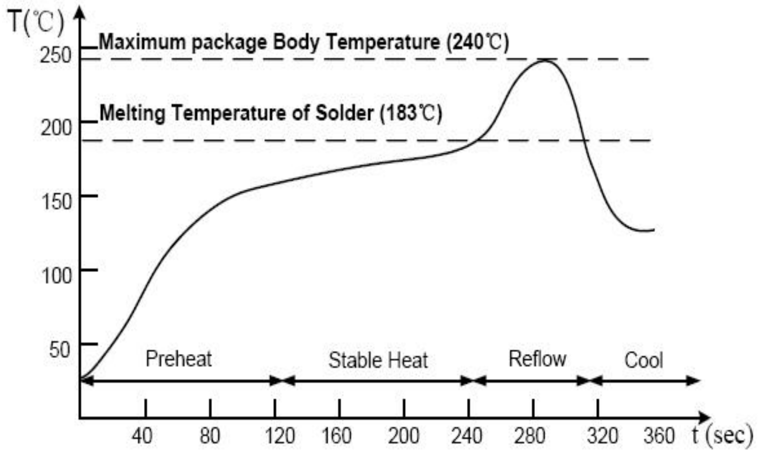


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

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	525*31.9*6.4	0.05	545*150*45	1.0	575*245*170	5.0