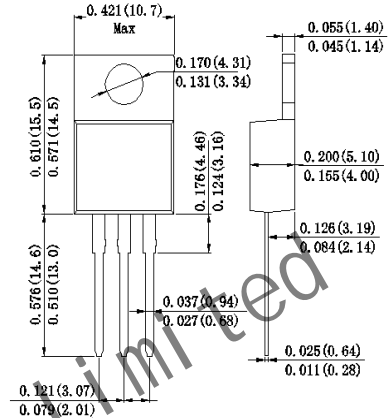


## 30.0Amp Schottky Barrier Rectifiers

### 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 250°C/10 seconds at terminals

TO-220AB



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

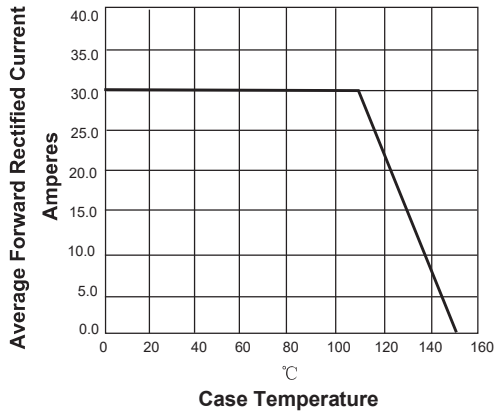
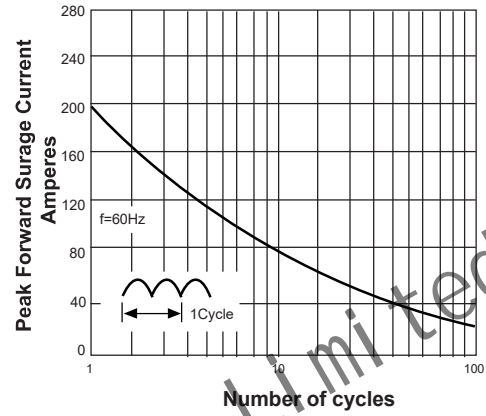
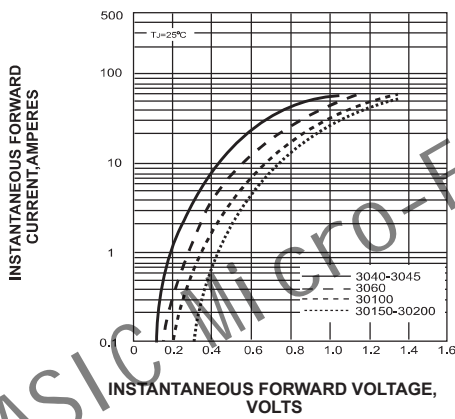
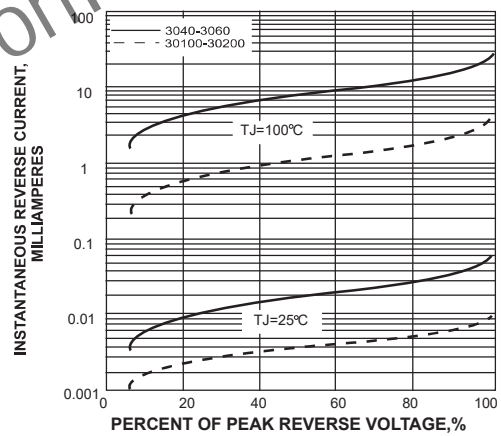
**Mounting Position :** Any

### Maximum Ratings And Electrical Characteristics

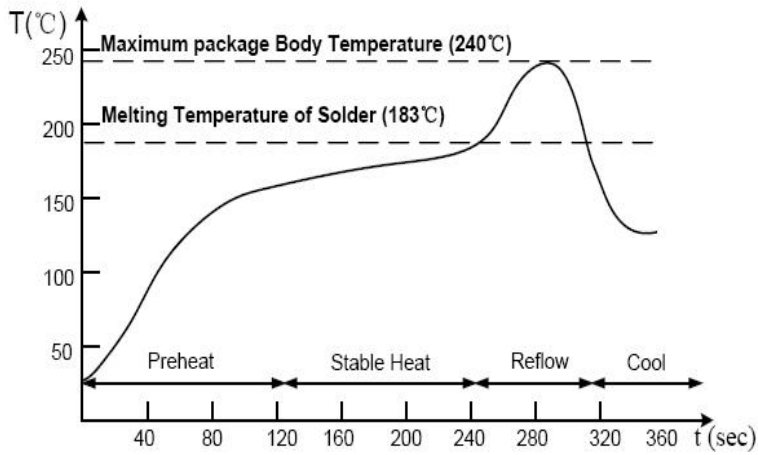
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	ASBMBR3040CTUX0	ASBMBR3045CTUX0	ASBMBR3060CTUX0	ASBMBR30100CTUX0	ASBMBR30150CTUX0	ASBMBR30200CTUX0	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	45	60	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	28	31.5	42	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	40	45	60	100	150	200	V
Maximum average forward rectified current at $T_c=110^\circ\text{C}$ 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	$I_{FSM}$	200.0						A
Maximum instantaneous forward voltage per diode at 15.0A	$V_F$	0.65	0.75	0.85	0.95		V	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A=25^\circ\text{C}$ 0.5			$T_A=100^\circ\text{C}$ 10		mA	
Typical thermal resistance	$R_{qJC}$	3.5						$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to +150						$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150						$^\circ\text{C}$

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