

30.0A 60V Low VF 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
260°C/10 seconds at terminals

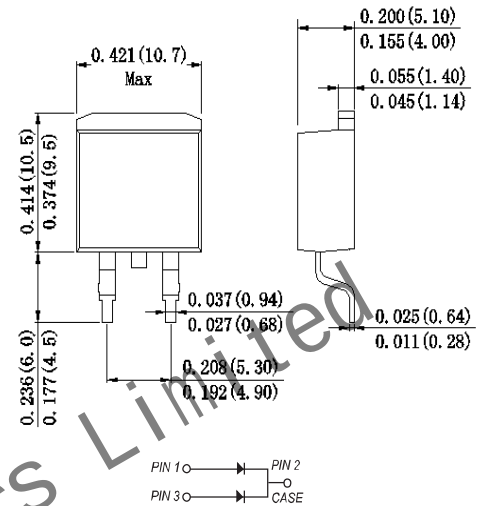
Mechanical Data

Case : Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

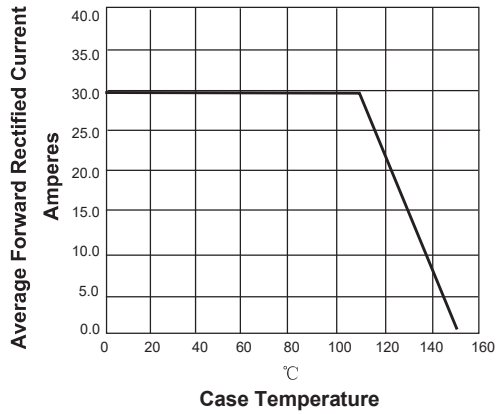
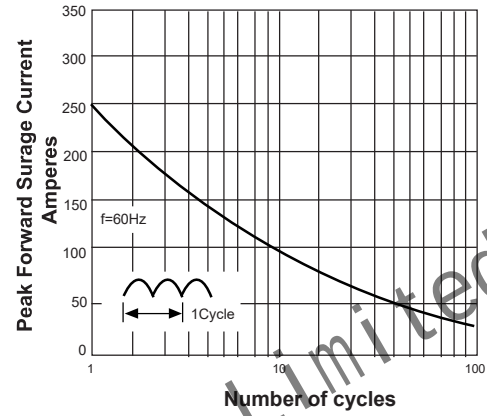
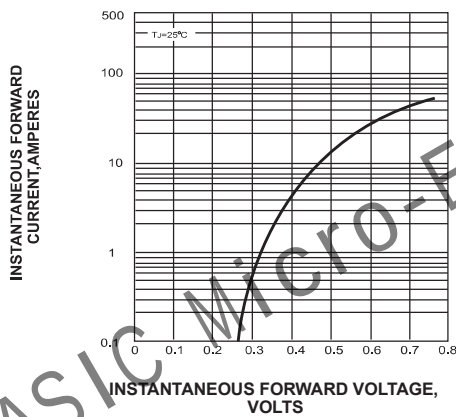
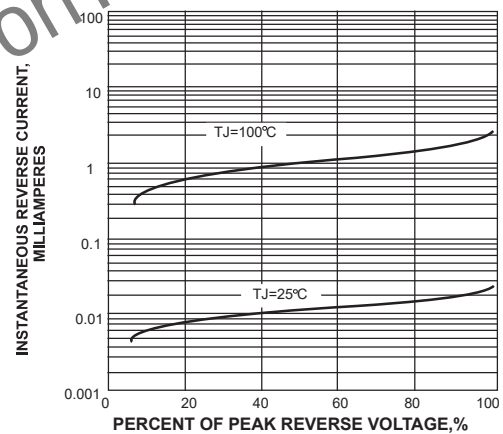
TO-263

Maximum Ratings (Ta=25°C unless otherwise specified)

PARAMETER	SYMBOLS	ASBMBR3060LCTPX0	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC blocking voltage	V_{DC}	60	V
Maximum average forward rectified current at $T_c=110^\circ\text{C}$	$I_{(AV)}$	30.0 15.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250.0	A
Typical thermal resistance	$R_{\theta JC}$	4.0	$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

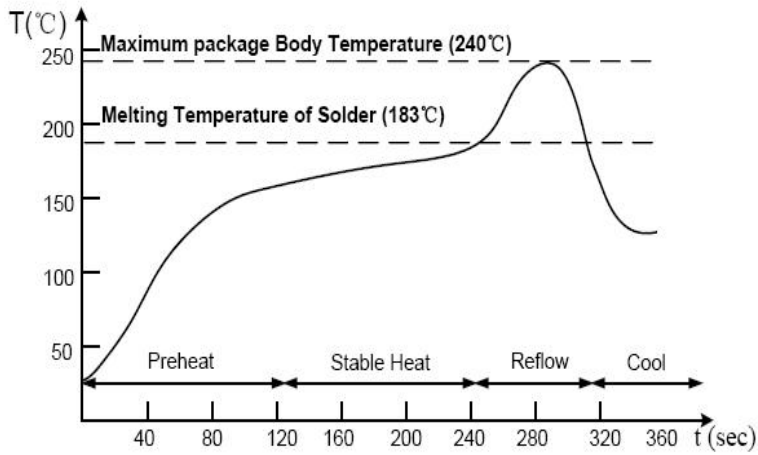
Electrical Characteristics (Ta=25°C unless otherwise specified)

PARAMETER	SYMBOLS	TYPE	MAX	UNITS
Maximum instantaneous forward voltage per diode at 15.0A	V_F	0.52	0.6	V
Maximum DC reverse current at rated DC blocking voltage	I_R	30 2	200 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



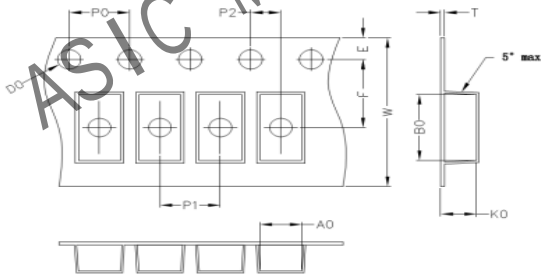
Note

- 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

➤ Reel Package

Carrier Dimension(mm)



A0	B0	K0	D0	E	F
10.5	15.55	4.90	1.50	1.75	11.5
P0	P1	P2	T	W	Tolerance
4.0	16.0	2.0	0.4	24	0.1

Package Specifications

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
TO-263	13'	330	0.8	340	0.8	360*360*360	6.4

➤ Tube Package

Package	Tube (mm)	Q'TY/Tube (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
TO - 263	525*31.9*6.4	0.05	545*150*45	1.0	575*245*170	5.0