

Single Phase 5.0Amp Schottky Bridge Rectifiers
ABS

Features

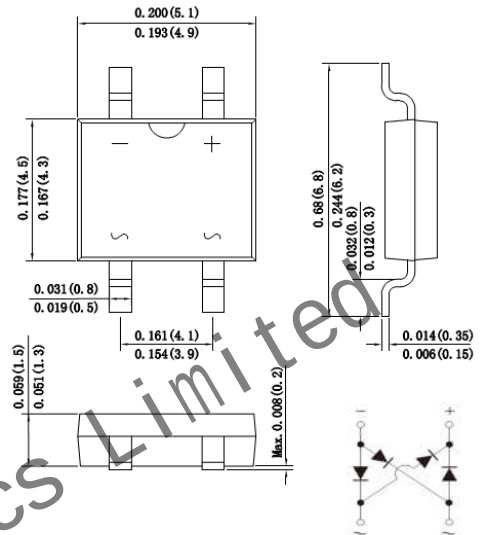
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Metel-Silicon Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
250°C/10 seconds at terminals

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

Weight : 0.0034 ounce, 0.098 grams


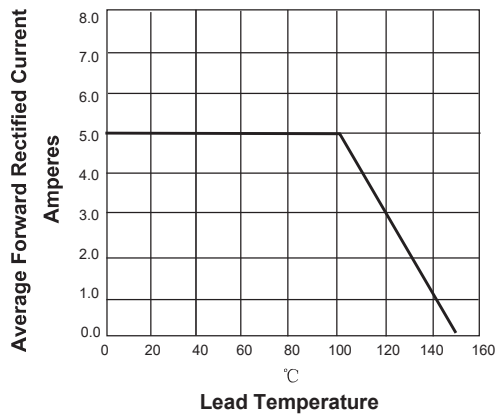
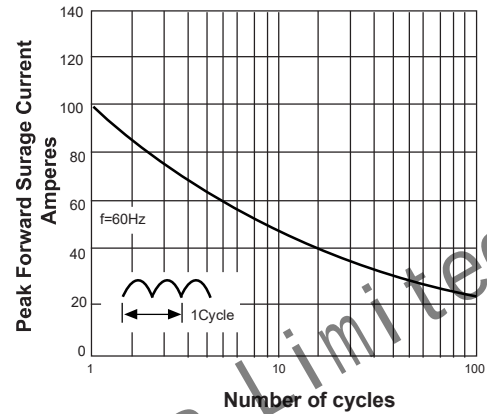
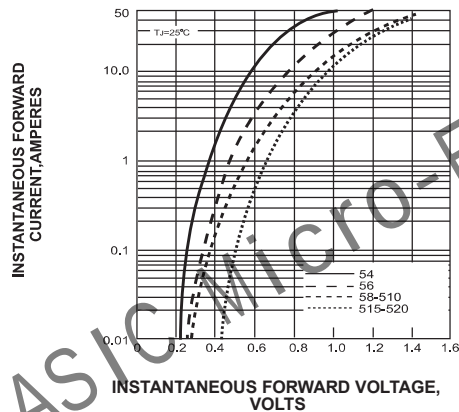
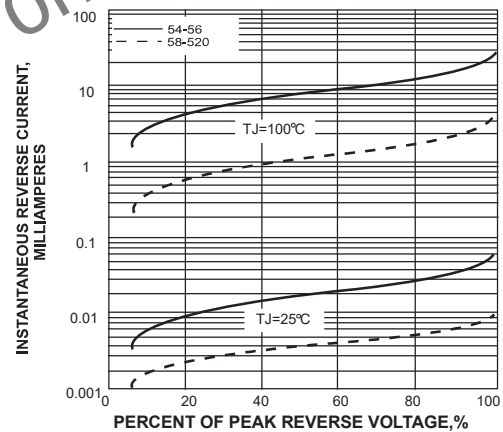
Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

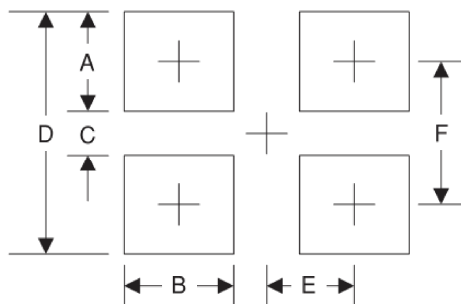
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	ARDKAB S54HX0	ARDKAB S56HX0	ARDKAB S58HX0	ARDKAB S510HX0	ARDKAB S515HX0	ARDKAB S520HX0	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	60	80	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	42	56	70	105	140	V
Maximum DC blocking voltage	V _{DC}	40	60	80	100	150	200	V
Maximum average forward rectified current at T _L =100°C	I _(AV)	5.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100.0						A
Maximum instantaneous forward voltage at 5.0A	V _F	0.55	0.70	0.85		0.95		V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5 50		0.1 10				mA
Rating for fusing (t=8.3ms, T _a =25°C)	I ² _t	26.5						A ² _s
Typical thermal resistance	R _{qJA}	80.0						°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

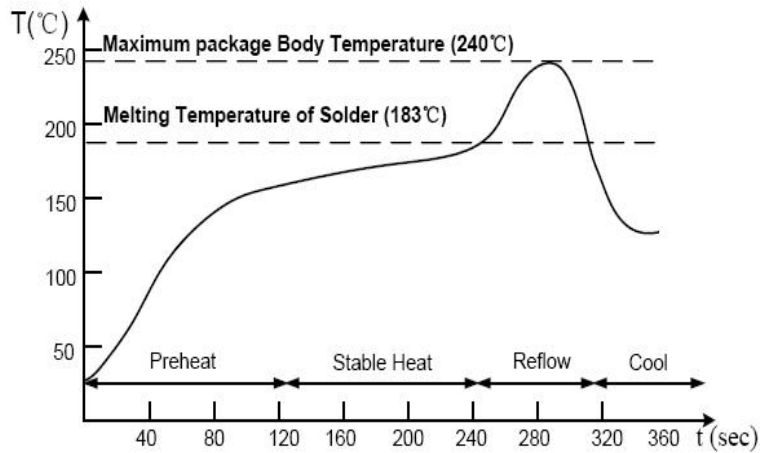
FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

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

FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS


Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.5	0.059
B	1.0	0.039
C	4.22	0.166
D	7.22	0.284
E	2.0	0.078
F	5.70	0.224

Suggested Soldering Temperature Profile

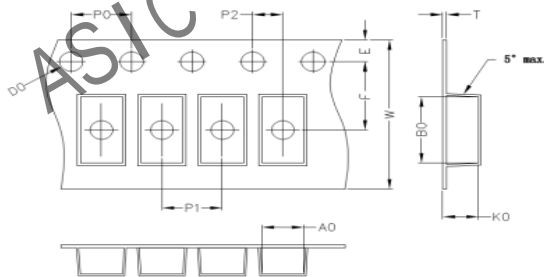


Note

- 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

Carrier Dimension(mm)



A0	B0	K0	D0	E	F
5.31	6.68	1.6	1.55	1.75	5.50
P0	P1	P2	T	W	Tolerance
4.0	8.0	2.0	0.25	12	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)
ABS	11'	278	3	280	6	355*310*310	48
	13'	330	5	338	10	365*365*360	80