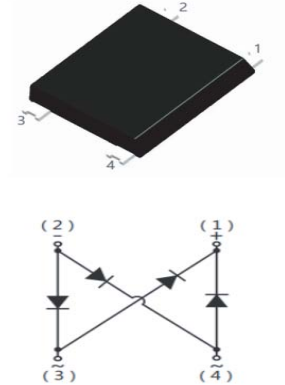


Single Phase 4.0Amp Fast Recovery Bridge Rectifiers

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
260°C/10 seconds at terminals

MSB Package



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	RMSB40B	RMSB40D	RMSB40G	RMSB40J	RMSB40K	RMSB40M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ C$	$I_{(AV)}$	4.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0						A
Rating for fusing ($t=8.3ms, T_a=25^\circ C$)	I_t^2	93.3						A^2_s
Maximum instantaneous forward voltage at 4.0A	V_F	1.3						V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$	I_R	2.0 200						μA
Maximum Reverse Recovery Time (Note 1)	TRR	150			250	500		ns
Typical junction capacitance (Note 2)	C_J	40						pF
Typical thermal resistance	R_{QJA}	55						$^\circ C/W$
Operating junction and storage temperature range	$T_{J,TSTG}$	-55 to +150						$^\circ C$

Note: 1 .Reverse Recovery Test Conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.



Single Phase 4.0Amp Fast Recovery Bridge Rectifiers

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

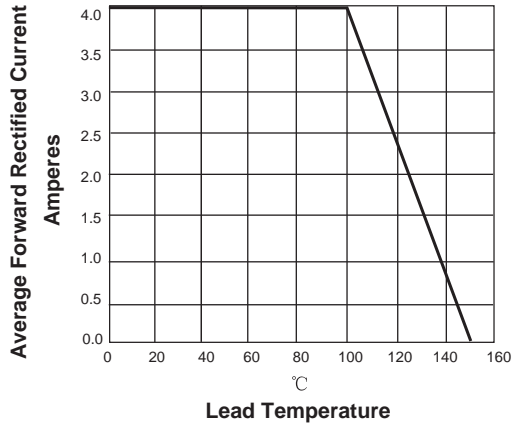


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

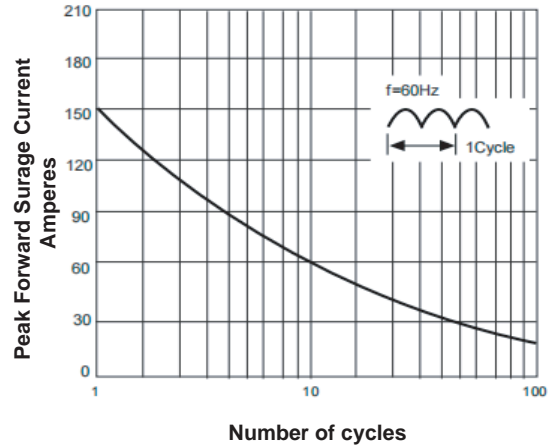


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

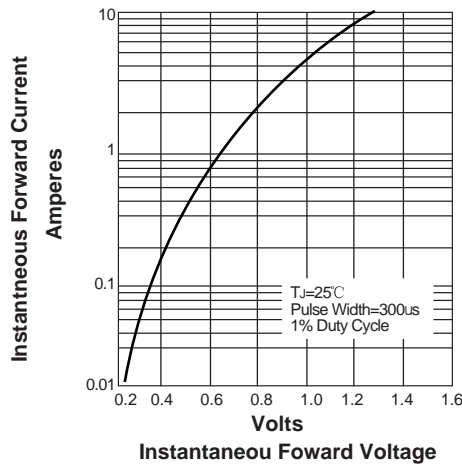
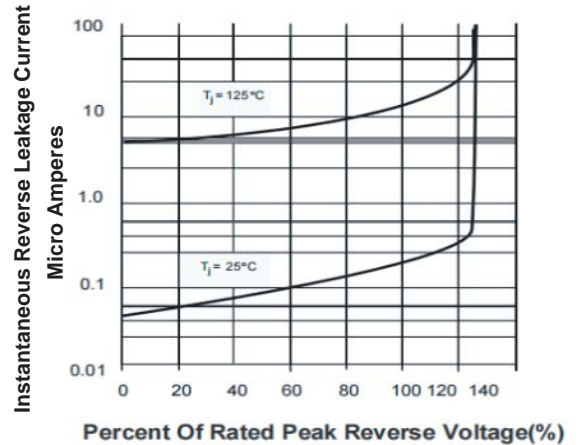
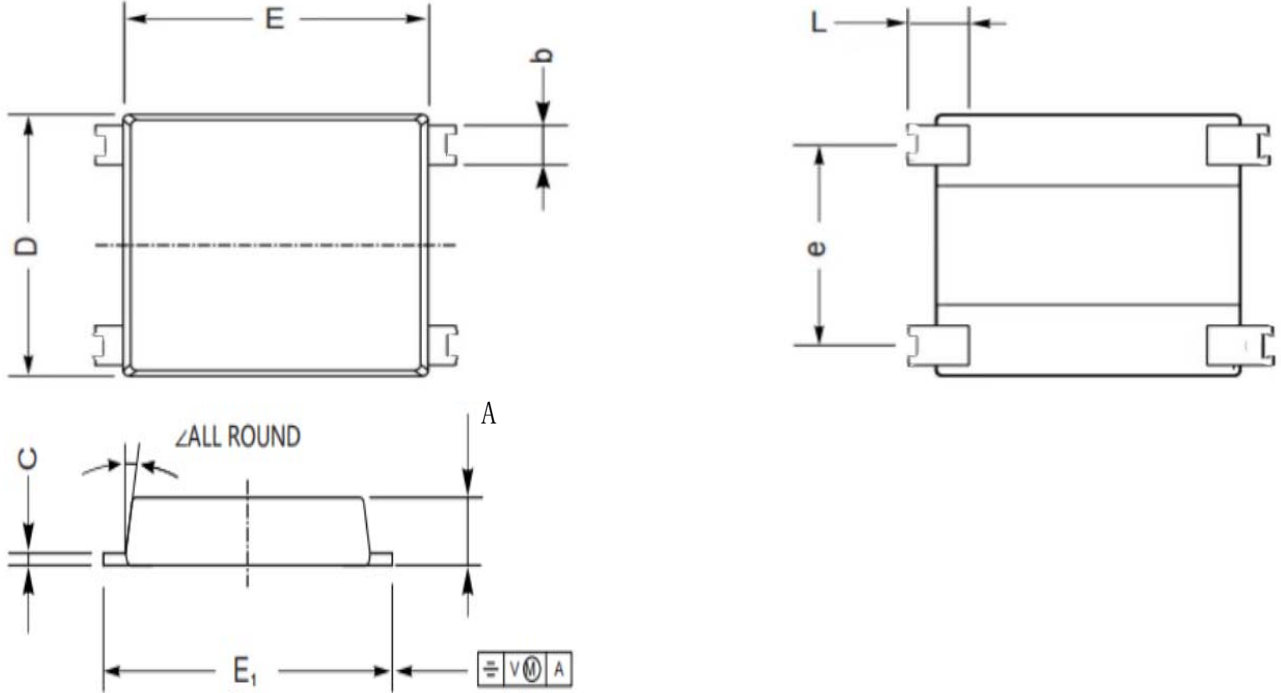


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Single Phase 4.0Amp Fast Recovery Bridge Rectifiers

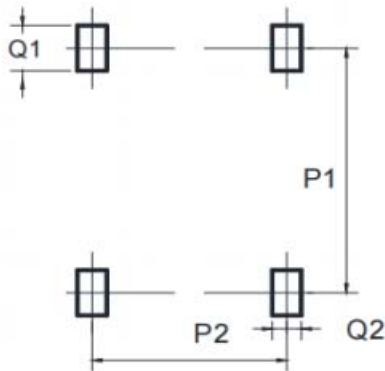
PACKAGE OUTLINE DIMENSIONS MSB



MSB mechanical data

UNIT		A	C	D	E	E1	L	e	b	∠
mm	max	1.5	0.29	7.0	7.6	8.9	1.6	5.3	1.15	7°
	min	1.3	0.17	6.2	7.1	8.4	1.0	4.9	0.95	
mil	max	59	12	276	299	350	63	209	45	
	min	51	7	244	280	331	39.3	193	37	

MSB Suggested Pad Layout



UNIT		P1	P2	Q1	Q2
mm	min	8.30	5.10	1.6	1.2
mil	min	326.77	200.79	63.0	47.25

Dimensions is millimeters