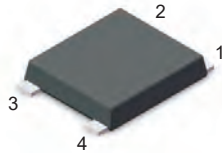


Schottky Bridge Rectifier



MSB Package

PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

Features

- Glass Passivated Chip Junction
- Reverse Voltage - 60 V
- Forward Current - 5.0A
- High Surge Current Capability
- Designed For Surface Mount Application

Benefits

- Case: MSB
- Terminals: Solderable Per MIL-STD-750
- Reduced power loss and switching transistor

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	KMSB56LA	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	60	V
Maximum RMS voltage	VRMS	42	V
Maximum DC Blocking Voltage	VDC	60	V
Average Rectified Output Current	I_o	5.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	80	A
$I^2 t$ rating for fusing (1ms < t < 8.3ms)	$I^2 t$	26.5	A ² S
Maximum Forward Voltage	VF	@ $I_F=3A$	0.45(TYP)
		@ $I_F=5A$	0.59
Maximum DC Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage	IR	0.3	mA
Typical Junction Capacitance (Note1)	Cj	300	pF
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150	°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

Fig.1 Average Rectified Output Current Derating Curve

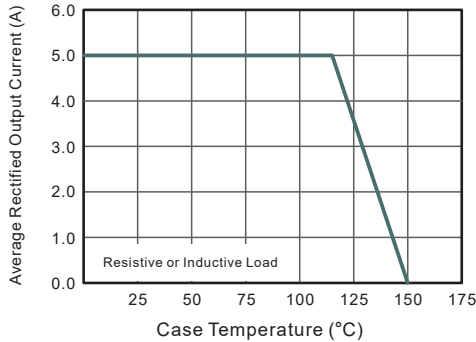


Fig.2 Typical Reverse Characteristics

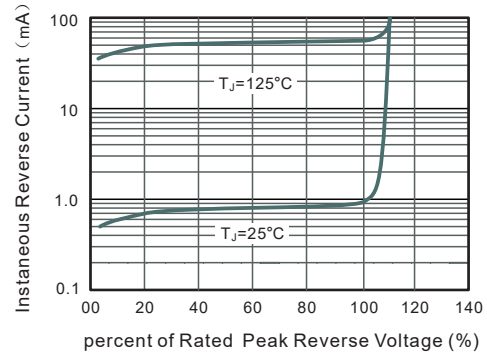


Fig.3 Typical Instantaneous Forward Characteristics

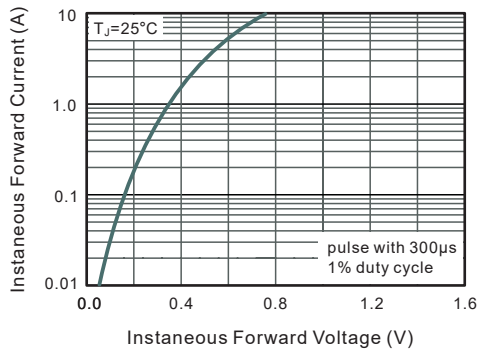


Fig.4 Typical Junction Capacitance

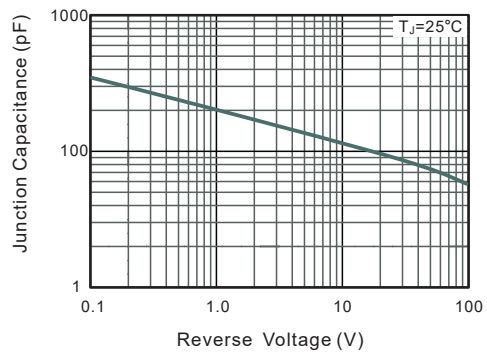
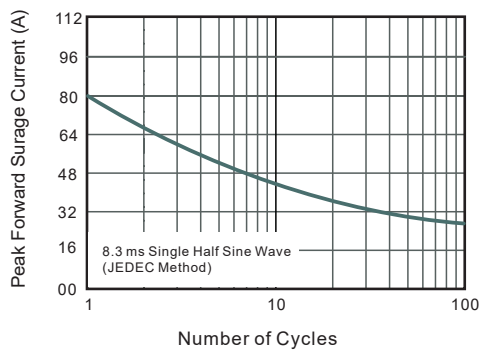
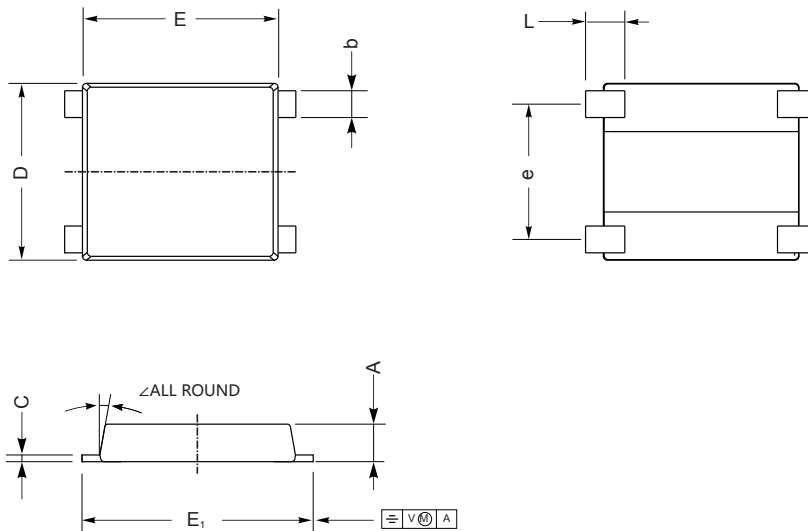


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE DIMENSIONS

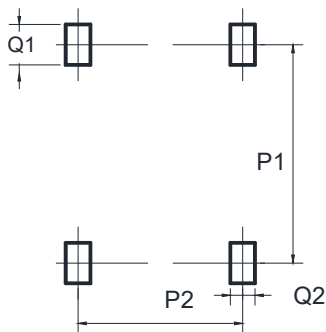
MSB



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	

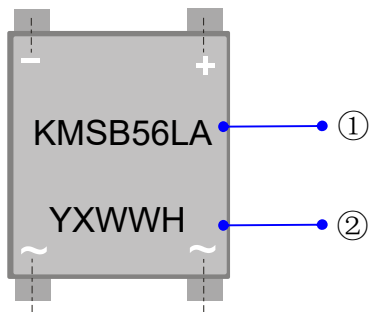
MSB Suggested Pad Layout



Dimensions is millimeters

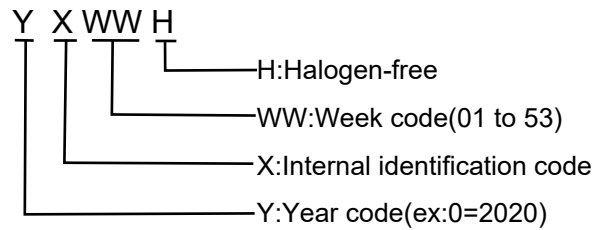
UNIT		P1	P2	Q1	Q2
mm	min	8.30	5.10	1.6	1.2
mil	min	326.77	200.79	63.0	47.25

Marking Information



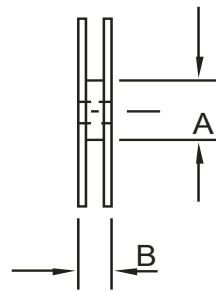
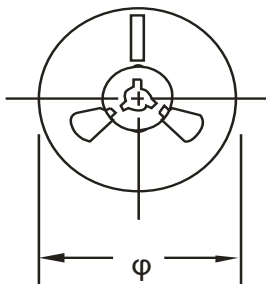
① Product model : KMSB56LA

② PDC information :

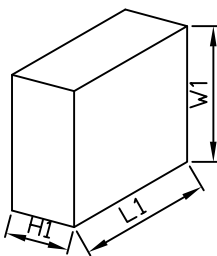


Packaging Information

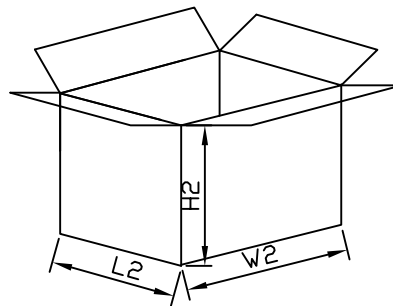
1. Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
		φ	A	B	L1	W1	H1	L2	W2	H2
Size	mm	330	100	15	340	340	46	360	360	270
QTY	PCS	Smallest package, 3000PCS/reel			6,000PCS, 2 reel in total			30,000PCS/carton, 5boxes in total		
Note		Tolerance ≤20mm, ±3mm;			21-100mm, ±5mm;			101-500mm, ±10mm		