

SCHOTTKY SURFACE MOUNT BRIDGE RECTIFIERS

REVERSE VOLTAGE – 60 Volts FORWARD CURRENT – 2.0 Ampere

FEATURES

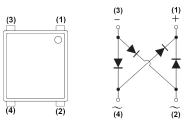
- Rating to 60V PRV
- Compact, thin profile package design
- · Ideal for SMT manufacturing
- Reliable robust construction
- The plastic material has UL flammability classification 94-0



MECHANICAL DATA

- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl) "Halogen-free"
- · Polarity indicator: As marked on body

Marking: MK260Weight: 70 mg



Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

		•	
Characteristics	Symbol	Limit	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Maximum Average Forward Rectified Current @Tc =110 $^{\circ}$ C	I _(AV)	2.0	Α
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	50	Α
I ² t Rating for fusing (1ms < t < 8.3ms)	I ² t	10.4	A ² S
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics

Characteristics		Test Condition	Symbol	Min	Тур.	Max	Unit
Maximum Forward Voltage	@Tj=25°C @Tj=125°C	IF = 1A	V _F		055 0.46		V
Maximum Forward Voltage	@Tj=25°C @Tj=125°C	IF = 2A	V _F		0.56	0.7 0.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@Tj=25°C @Tj=125°C	VR = 60V	I _R			0.02 100	mA
Typical junction capacitance per ele	ment	Note(1)	Сл		125		pF

Thermal Characteristics

Characteristics	Symbol	Min	Тур.	Max	Unit
	ReJC		15		
Typical Thermal Resistance (Note 2)	R⊖JL		25		°C/W
	R⊖ _{JA}	-	75		
Note:		Rev.0, July-2014, KBD	A28		

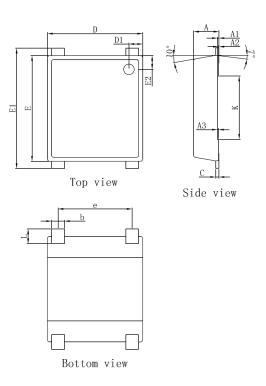
(1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC $\,$

⁽²⁾ Thermal Resistance test performed in accordance with JESD-51. Unit mounted on glass-epoxy substrate with 1oz/ft2_5 x 5 mm copper pad.



Package Dimension

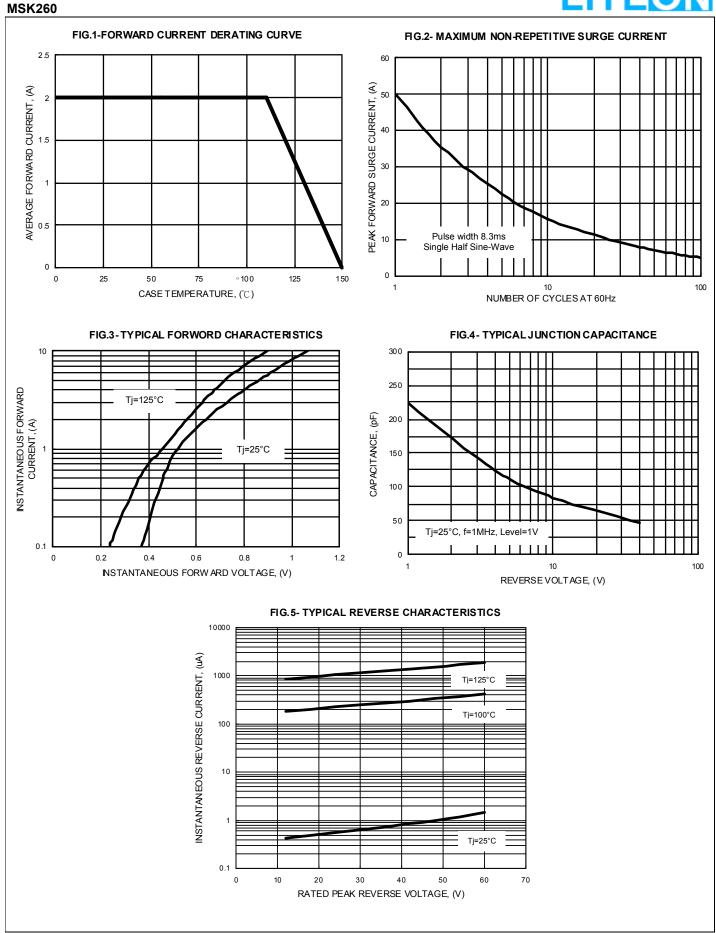
MSB



MSB						
Dim.	Min.	Тур.	Max.			
Α	1.10	1.20	1.30			
A1	0.05		0.08			
A2	0.00	0.02	0.05			
A3	0.03	0.05	0.08			
С	0.12	0.15	0.18			
D	4.40	4.5	4.60			
D1	0.60	0.65	0.70			
E	4.90	5.00	5.10			
E1	5.60	5.70	5.80			
E2	0.60	0.65	0.70			
L	0.65	0.70	0.75			
b	0.55	0.60	0.70			
е	3.45	3.50	3.55			
K	2.95	3.00	3.05			
All dimensions in millimeter						

RATING AND CHARACTERISTIC CURVES MSK260



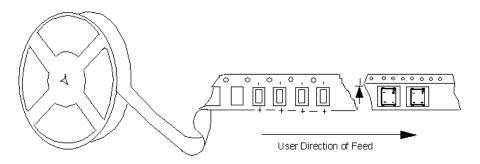




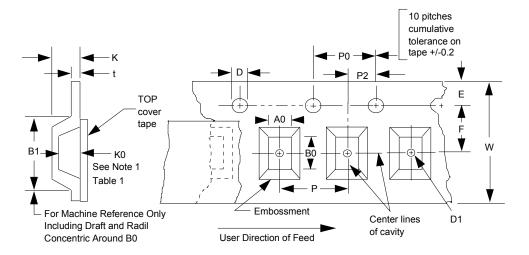
Packaging Information

DEVICE	Q'TY/REEL (PCS)	REEL DIA. (mm)	BOX SIZE (mm)	Q'TY/BOX (PCS)	CARTON SIZE (mm)	Q'TY/CARTON (PCS)	MOQ
MSK260	3000	330	334x334x21	3000	365x365x355	36K	36K

Polar Units



Embossed Carrier Dimension



UNIT: mm

TAPE SIZE	D	Е	PO	t (MAX)	A0	B0	K0
	1.55+0.10/-0.0	1.75+/-0.10	4.0+/-0.10	0.4	4.8+/-0.1	6.0+/-0.1	1.5+/-0.1
12mm	B1 (MAX)	D1 (MIN)	F	K (MAX)	P2	W	Р
	8.2	1.5	5.5+/-0.1	2.2	2.0+/-0.05	12.0+/30	8.0+/-0.1





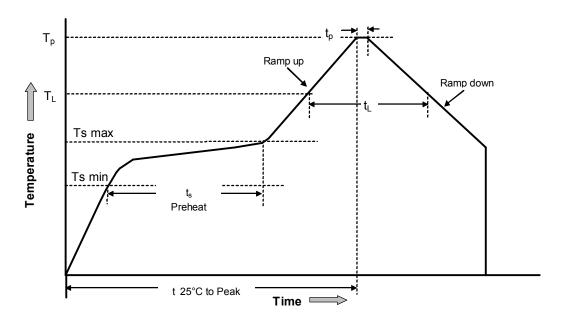


Table 1- Reflow profile

Table 1 Relief Profile						
Reflow condition	Sn-Pb assembly	Pb-free assembly				
Average ramp-up rate (Liquidus Temperautre (TL) to Peak)	3 °C/second max.	3 °C/second max.				
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Preheat						
Tempautre Min, Ts (Min)	100 °C	150 °C				
Temperature Max, Ts (Max)	150 °C	200 °C				
Time (min to max, ts)	60-120 seconds	60-180 seconds				
Ts(max) to TL		3 °C/second max.				
- Ramp-up Rate		5 C/Sewiid Illax.				
Time maintained above:						
Temperature(TL)	183 °C	217 °C				
Time(tL)	60-150 seconds	60-150 seconds				
Peak Temperature (Tp)	240 +0/-5 °C	260 +0/-5 °C				
Time within 5 °C of actual Peak	10-30 seconds	20-40 seconds				
Temperature(tp)	10-30 3600103	20-40 3EWHUS				
Ramp-down Rate	6 °C/second max.	6 °C/second max.				
Time 25 °C to Peak Temperature.	6 minutes max.	8 minutes max.				

Note: All temperatures refer to topside of the package, measured on the package body surface



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