

MSB401S THRU MSB407S

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Ampere

FEATURES

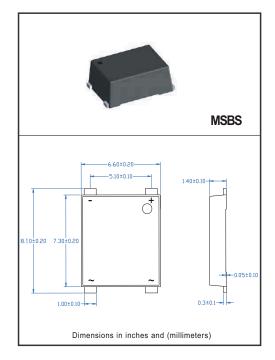
- * Good for automation insertion
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Mounting position: Any

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O
- * Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 $^{\circ}\text{C}$ ambient temperature unless otherwise specified. resistive or inductive load.



MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	MSB401S	MSB402S	MSB403S	MSB404S	MSB405S	MSB406S	MSB407S	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at T _C = 110 °C	rent at T _C = 110 °C I _O 4.0					Amps			
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	120						Amps	
pical Current Squared Time I ² t 59.76						A ² S			
Turical Thornal Desistance (Note 2)	R _{θJA}	55					- ºC/W		
Typical Thermal Resistance (Note 2)	R _{θJL}	15						C/W	
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150						٥C	

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

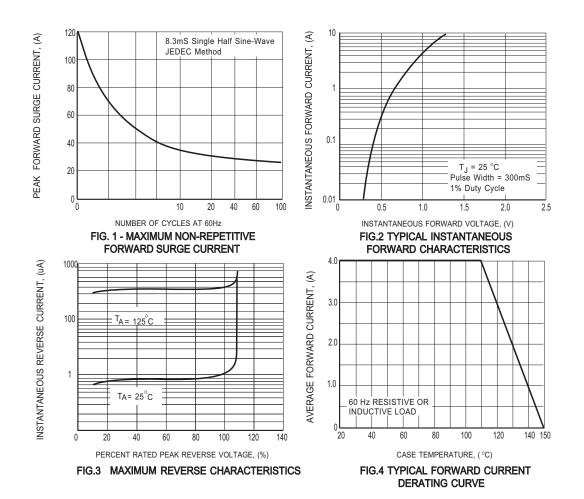
CHARACTERISTICS	SYMBOL	MSB401S	MSB402S	MSB403S	MSB404S	MSB405S	MSB406S	MSB407S	UNITS	
Maximum Forward Voltage Drop per Bridge	VE	4.4							Volts	
Element at 4.0A DC	٧F	1.1								
Maximum Reverse Current at Rated	@T _A = 25°C	lo.	1.0						μAmps	
DC Blocking Voltage per element	@T _A = 125°C	IR IR	500							μAmps

Note: 1."Fully ROHS compliant","100% Sn plating(Pb-free).

2. Thermal Resistance: Mounted on PCB.

2016-08 REV:A

RATING AND CHARACTERISTICS CURVES (MSB401S THRU MSB407S)





REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES - MSBS

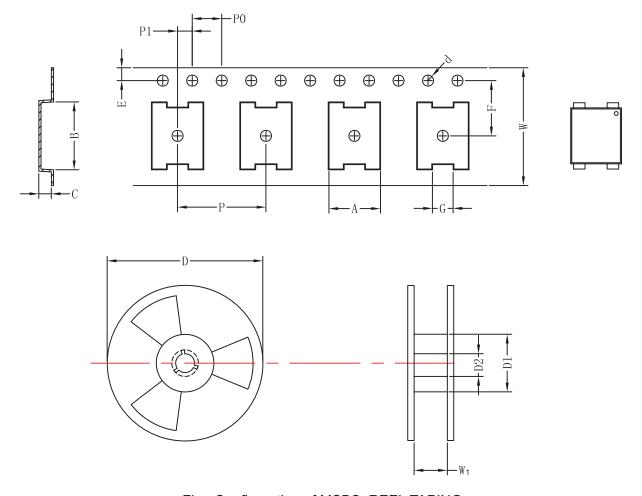


Fig.: Configuration of MSBS REEL TAPING

ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (inch)		
Carrier width	А	0.69 ± 0.1	0.272 ± 0.004		
Carrier length	В	7.60 ± 0.1	0.299 ± 0.004		
Carrier depth	С	1.70 ± 0.1	0.067 ± 0.004		
Sprocket hole	d	1.50 ± 0.1	0.059 ± 0.004		
Reel outside diameter	D	330.0 ± 2.0	12.992 ± 0.079		
Reel inner diameter	D1	16.4 ± 2.0	0.646 ± 0.079		
Feed hole diameter	D2	13.0 ± 0.2	0.512 ± 0.008		
Sprocket hole position	Е	1.75 ± 0.1	0.069 ± 0.004		
Punch hole position	F	7.5 ± 0.1	0.295 ± 0.004		
Punch hole pitch	Р	12.0 ± 0.1	0.472 ± 0.004		
Sprocket hole pitch	P0	4.0 ± 0.1	0.157 ± 0.004		
Embossment center	P1	2.0 ± 0.1	0.079 ± 0.004		
Tape width	W	16.0 ± 0.3	0.63 ± 0.012		
Reel width	W1	22.4 ± 1.0	0.882 ± 0.039		

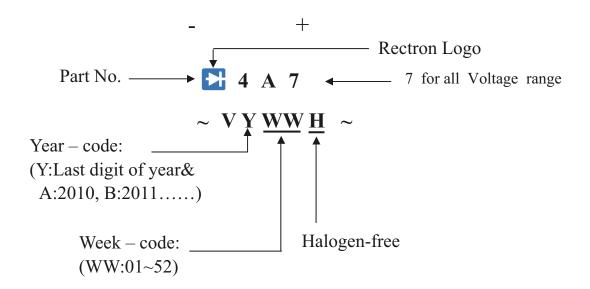
PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MSBS	-T	3,000	3,000	9.5	52	330	360*355*360	24,000	9.0



Marking Description





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