

# Bridge Rectifiers

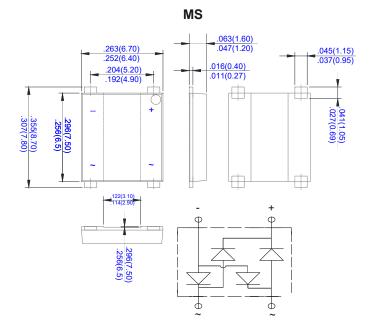
MS5M 1000 V 5.0 A

## **Typical Applications**

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

#### Features And Mechanical Data

- Package:MS
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- · Glass passivated Junction chip
- · Low reverse leakage
- · High forward surge current capability
- High temperature soldering guaranteed
  255 C/1 0 seconds at terminals applications.
- Terminals: Tin plated leads, solderable per STD-002 and JESD22-B102
- · Polarity: As marked on body



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, derate current by 20%.

Parameter	Symbols	MS5M	Units
Type number marking code	Cymbols	MS5M	Units
Maximum recurrent peak reverse voltage	VRRM	1000	Volts
Maximum rms voltage	VRMS	700	Volts
Maximum dc blocking voltage	VDC	1000	Volts
Maximum average forward rectified current. Lead length Sine wave 60Hz resistive or Inductive Load	I(AV)	5.0 Fig. 1	Amp
Peak forward surge current, 8.3 ms single half- sine-wave Superimposed on rated load (jedec method) (rating of per diode)	IFSM	100	Amp
Maximum instantaneous forward voltage drop per diode at 1/2 I(AV)	VF	1.0	Volts
Maximum DC reverse current at rated DC blocking voltage per	IR	5 500	uA
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	l²t	41.5	A2S
Typical thermal resistance between junction and ambient	ROJA	60	°C/W
Typical thermal resistance between junction and case	ROJC	15	°C/W
Typical thermal resistance between junction and lead	ROJL	20	°C/W
Junction temperature	TJ	-65 to +150	°C
Storage temperature range	T <sub>STG</sub>	-65 to +150	°C

#### Note:

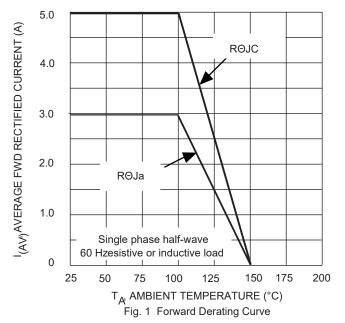
- 1.Unit mounted on 15 mm\*15 mm\*1.6 mm 1oz/ft2 glass epoxy PCB board,pad per pin with 2\*2mm solder pad areas
- 2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.
- 3. The typical data above is for reference only.
- \*This product The above data sheet typical data meet the Mentioned standards, designers for reference only

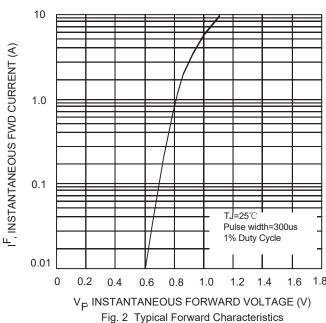
### **Ordering Information** (Example)

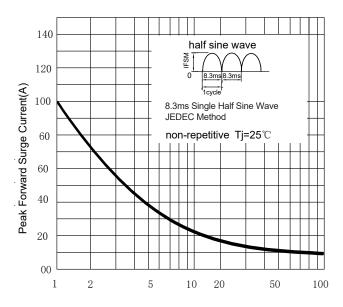
Prefered P/N Package code	Package code	Unit woight(g)	Minimum	Inner box	Outer carton	Delivery mode	
	Unit weight(g)	Package(pcs)	Quantity(pcs)	quantity(pcs)	Delivery mode		
MS	F1	about 0.22	3000	6000	60000	13' reel	

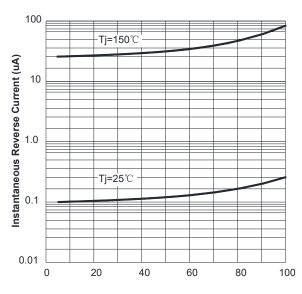
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Percent of Rated Peak Reverse Voltage (%) FIG4:Typical Reverse Characteristics