

MB120S

Surface Mount Schottky Bridge Rectifiers

PRV: 200 V , I_o: 1 Ampere

Features

- Low forward voltage (0.76V TYP @ 1.0A)
- Low leakage current (0.2µA TYP @ 200V)
- High current rating: 1.0A
- High voltage rating: 200V
- RoHS compliant package

Applications

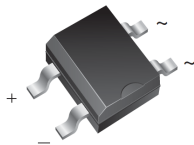
- Input rectification for LED lighting
- Power over Ethernet (PoE) peripherals
- General purpose full wave rectification

Mechanical Characteristics

- Epoxy: UL94V-O rate flame retardant
- Lead: Lead Formed for Surface Mount
- Case : MBS Molded Plastic

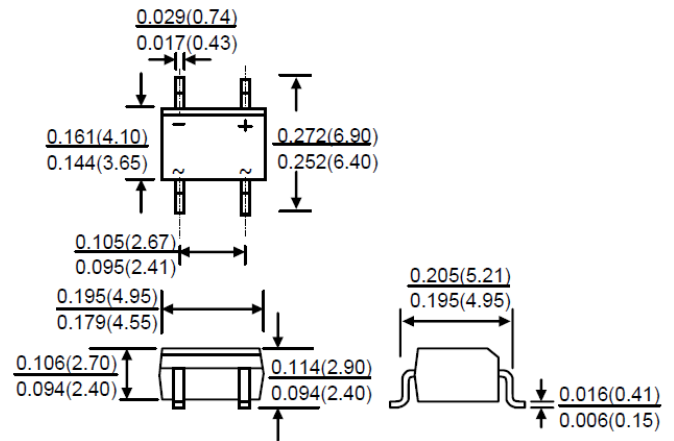
Packing & Order Information

3,000/Reel



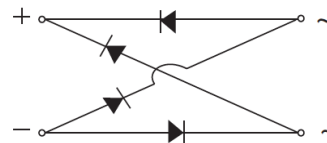
RoHS
COMPLIANT

MBS (TO-269AA)



Dimensions in inches and (millimeters)

Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (T_c=25°C unless otherwise noted)

Parameter	Symbol	MB120S	Unit
Maximum recurrent peak reverse voltage	VRRM	200	V
Maximum RMS voltage	VRMS	140	V
Maximum DC blocking voltage	VDC	200	V
Maximum average forward rectified Current Total device	IF(AV)	1.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30	A
Operating junction temperature range	T _J	-55 to +150 °C	°C
Storage temperature range	T _{STG}	-55 to +150 °C	°C

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Electrical characteristics (T_c=25°C unless otherwise noted)

Parameter	Symbol	Typ	Max	Unit
Maximum instantaneous current at I _F =1A, T _j =25°C	V _F	0.75	0.90	V
Maximum reverse current T _j =25°C	I _R	0.2	50	μA
at working peak reverse voltage T _j =125°C		-	20	mA

Thermal characteristics (T_c=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	Symbol	MB120S	°C/W
	R _{θJA}	85	
	R _{thjl}	28	

NOTE :

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms

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