

SURFACE MOUNT BRIDGE RECTIFIER

MBL06S

FEATURES

- High current capability
- High surge current capability
- High reliability
- Low forward voltage drop

APPLICATIONS:

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

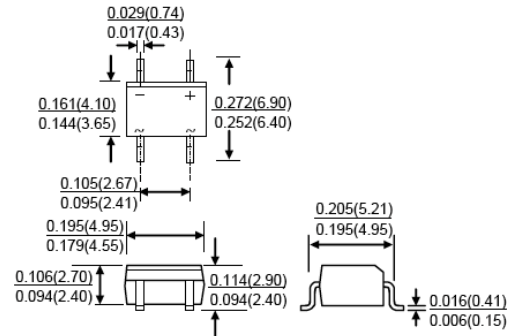
MECHANICAL DATA

Case: MBS

Epoxy: UL94V-O rate flame retardant

Lead: Lead Formed for Surface Mount

MBS (TO-269AA)



Dimensions in inches and (millimeters)



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

Parameter	Symbol	MBL106S	Unit
Maximum repetitive peak reverse voltage	VRRM	600	V
Working peak reverse voltage	VRWM	420	V
Maximum DC blocking voltage	VDC	600	V
Maximum average forward rectified current	IF(AV)	0.8	A
Peak forward surge current	IFSM	50	A
8.3ms single half sine-wave superimposed on rated load (JEDEC Method)			
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C

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

Parameter	Symbol	TYP	Max	Unit
Maximum instantaneous	VF	0.78	0.85	V
Maximum reverse current	IR	1	5	u'A
at working peak reverse voltage Tj=125°C		-	500	u'A

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

Parameter	Symbol	Unit
Typical thermal resistance	RθJA	75
	Rthjl	28

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

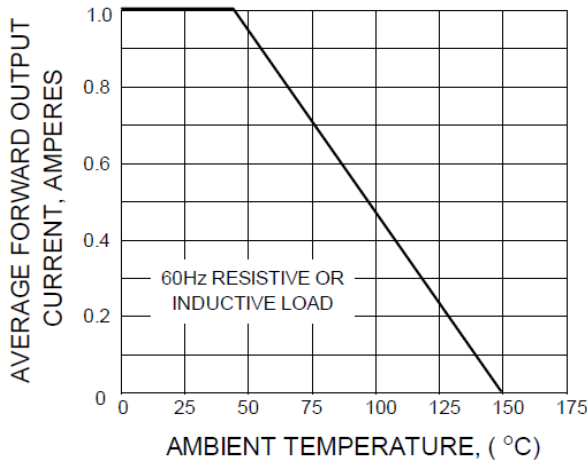


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

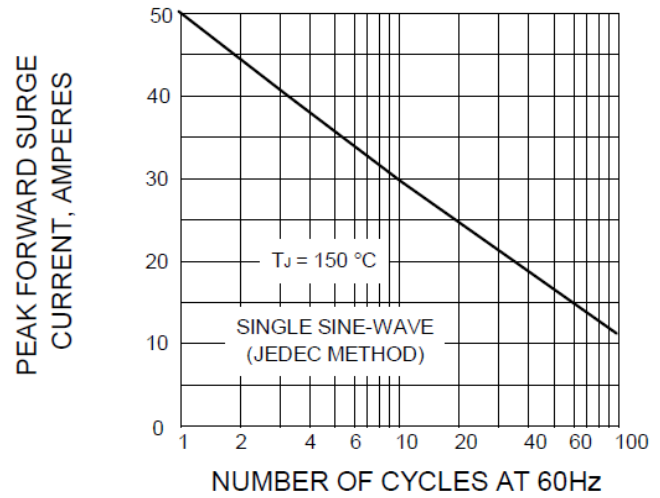


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

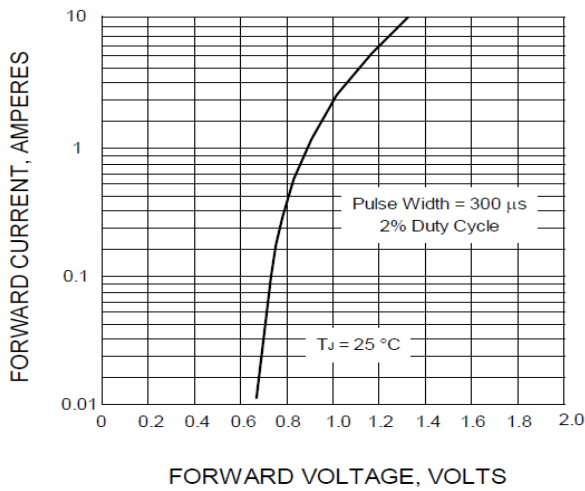


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

