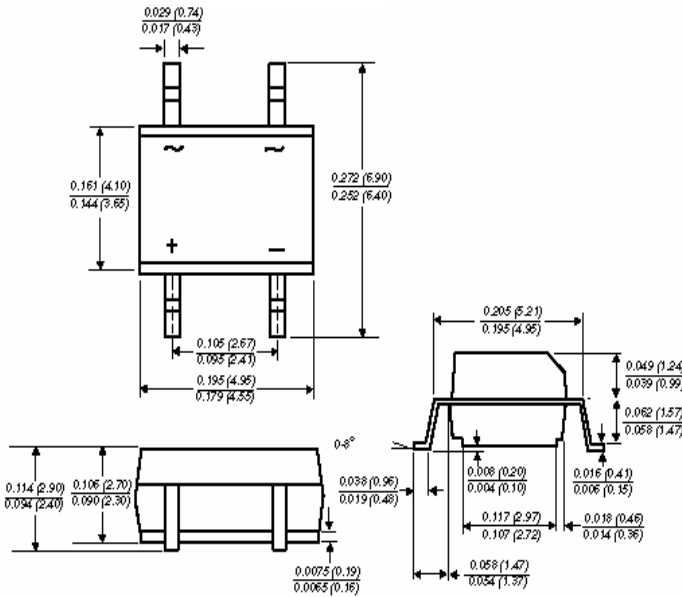


Case: MBS



Glass Passivated Single Phase Bridge Rectifiers

Reverse Voltage 200 to 1000V
Forward Current 0.5 Amp

Features

- Glass passivated die construction
- Ideal for automatic insertion
- Plastic material used carries UL flammability recognition 94V-0
- High surge current capability
- High case dielectric strength of 1500 VRMS

Mechanical Data

Case: Molded plastic case
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Marked on Body
Mounting Position: Any
Weight: 0.078 oz., 0.22g

SMSC Catalog Number	Maximum Repetitive Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB2S	200V	140V	200V
MB4S	400V	280V	400V
MB6S	600V	420V	600V
MB8S	800V	560V	800V
MB10S	1000V	700V	1000V

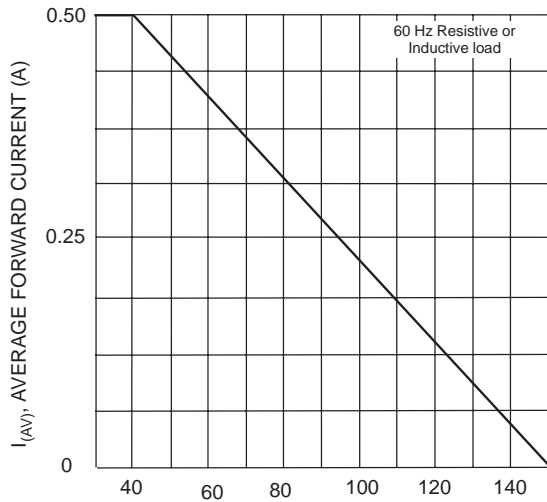
Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Maximum average forward output rectified current Tc = 40°C	IF(AV)	0.5	A
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	35	A
Rating for fusing (t<8.3ms)	i ² t	5.0	A ² s
Maximum thermal resistance per leg (1)	RθJA RθJC	85 20	°C/W
Operating Junction and storage temperature range	Tj, TSTG	-55 to 150	°C

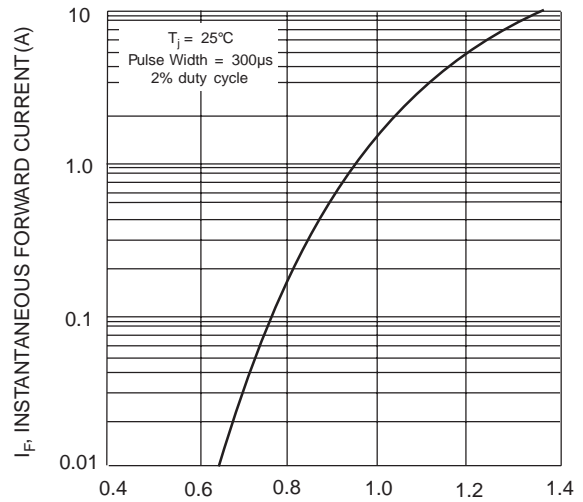
Electrical Characteristics (TA = 25°C unless otherwise noted)

Maximum Instantaneous Forward Voltage per leg	VF	1.0V	IFM = 0.5A
Maximum DC reverse current at rated DC blocking voltage per leg	IR	5.0µA 500µA	TA = 25°C TA = 125°C
Typical Junction Capacitance per leg	CJ	13pF	1.0MHZ, VR=4.0V

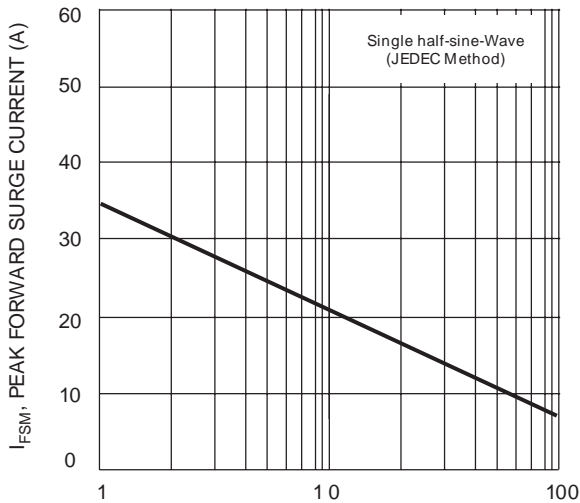
Notes: (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47 x 0.47" (12 x 12mm) copper pads.



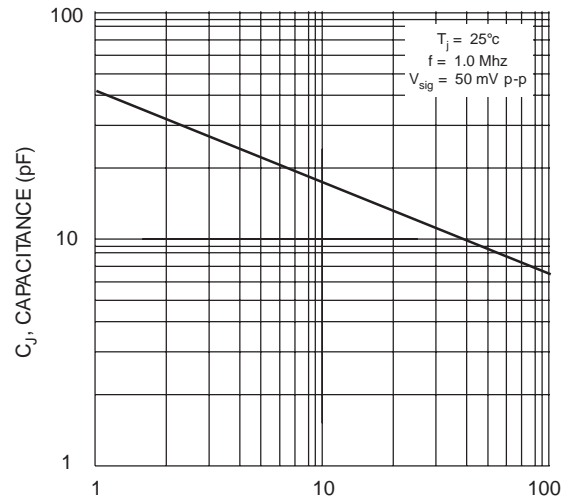
T_A , AMBIENT TEMPERATURE (°C)
 Fig. 1 Output Current Derating Curve



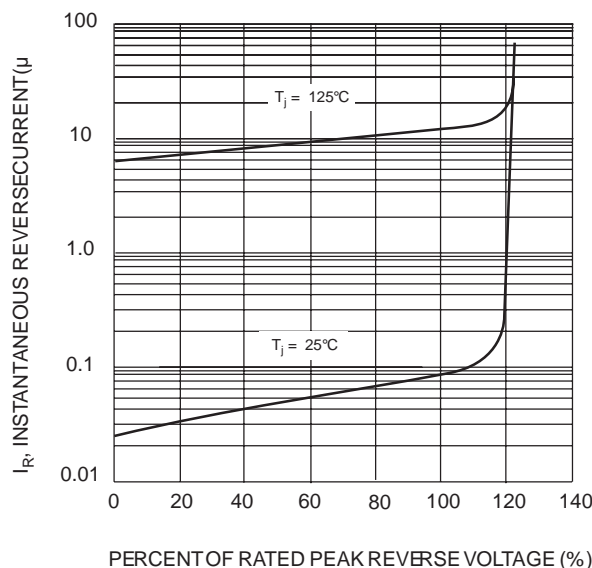
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
 Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
 Fig. 3 Max Non-Repetitive Peak Forward Surge Current



V_R , REVERSE VOLTAGE (V)
 Fig. 4 Typ Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
 Fig. 5 Typ Reverse Characteristics (per element)