

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

MB05S THRU MB10S

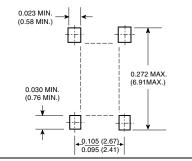
0.5 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

MBS -1 Representation of the second of the

DIMENSIONS							
	INCHES		ММ				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.252	.272	6.40	6.90			
В	.095	.106	2.41	2.70			
С	.150	.165	3.80	4.20			
D	.179	.195	4.55	4.95			
Е	.019	.031	0.50	0.80			
F	.090	.106	2.30	2.70			
G	.004	.008	0.10	0.20			
Н	.027	.043	0.70	1.10			
٦	.058	.062	1.47	1.57			
K	.195	.205	4.95	5.21			
M	.039	.049	0.99	1.24			
N	.006	.016	0.15	0.41			

Case Style

Mounting Pad Layout



Features

- Glass Passivated Diode Construction
- High Temperature Soldering Guaranteed:260°C/10 Second
- Saves Space On Printed Circuit Board

Mechanical Data

- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating and MSL Rating 1 per J-STD-020C
- Teminals: Plated leads Solderable per MIL-STD-750, Method 2026
- UL Recognized File # E165989

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB05S	MB05S	50V	35V	50V
MB1S	MB1S	100V	70V	100V
MB2S	MB2S	200V	140V	200V
MB4S	MB4S	400V	280V	400V
MB6S	MB6S	600V	420V	600V
MB8S	MB8S	800V	480V	800V
MB10S	MB10S	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.5 A ⁽²⁾ 0.8 A ⁽³⁾	See Fig.1				
Peak Forward Surge Current	I _{FSM}	35A	8.3ms, half sine				
Maximum Instantaneous Forward Voltage	V _F	1.0V	$I_{FM} = 0.4A;$ $T_A = 25^{\circ}C$				
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5uA 100uA	$T_A = 25^{\circ}C$ $T_A = 125^{\circ}C$				
Typical Thermal Resistance	$egin{array}{l} {\sf R}_{\sf thJA} \ {\sf R}_{\sf thJA} \ {\sf R}_{\sf thJL} \end{array}$	85°C/W ⁽²⁾ 70°C/W ⁽³⁾ 20°C/W ⁽²⁾	per leg				
Typical Junction Capacitance	CJ	13pF	Measured at 1.0MHz, V _R =4.0V				
Rating For Fusing	l ² t	5.0A ² s	t<8.30ms				
Operating Junction and Storage Temperature Range	T _J T _{STG}	-55to+150 °C					

Notes:

- 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7
- 2. On glass epoxy P.C.B. mounted on 0.05 x 0.05"(1.3 x 1.3mm)pads
- 3. On aluminum substrate P.C.B. with an area of 0.8" x 0.8"(20 x 20mm) mounted on 0.05 x 0.05"(1.3x 1.3mm) solder pad



Figure 1. Derating Curve for Output Rectified Current

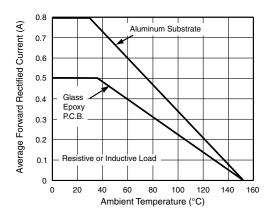
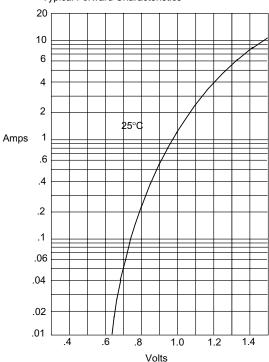
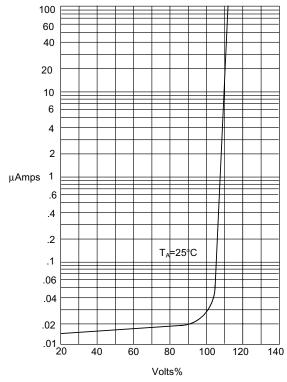


Figure 3
Typical Forward Characteristics

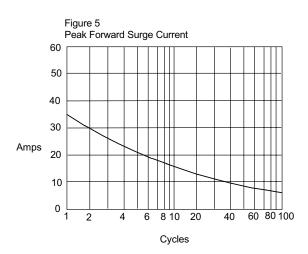


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts





Instantaneous Reverse Leakage Current - MicroAmperesersus Percent Of Rated Peak Reverse Voltage - Volts%



Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 50Hz - Cycles



Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

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