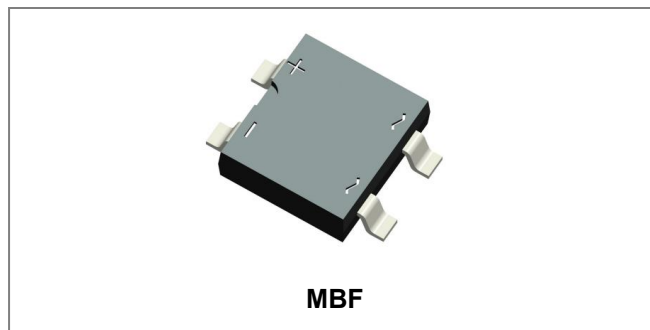


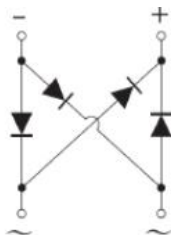
MB05F THRU MB10F SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: MBF, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Symbol	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	35	70	140	280	420	480	700	V
Average Rectified Output Current (Note 1)@ $T_A=40^{\circ}\text{C}$ (Note 2)@ $T_A=40^{\circ}\text{C}$	I_o					0.5 0.8			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}					30			A

Electrical Characteristics: @T_A=25°C unless otherwise specified

Type Number	Symbol	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Forward Voltage per element @I _F =0.8A	V _{FM}				1.1				V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _R				5 500				μA
Typical Junction Capacitance (Note 3)	C _j				13				pF

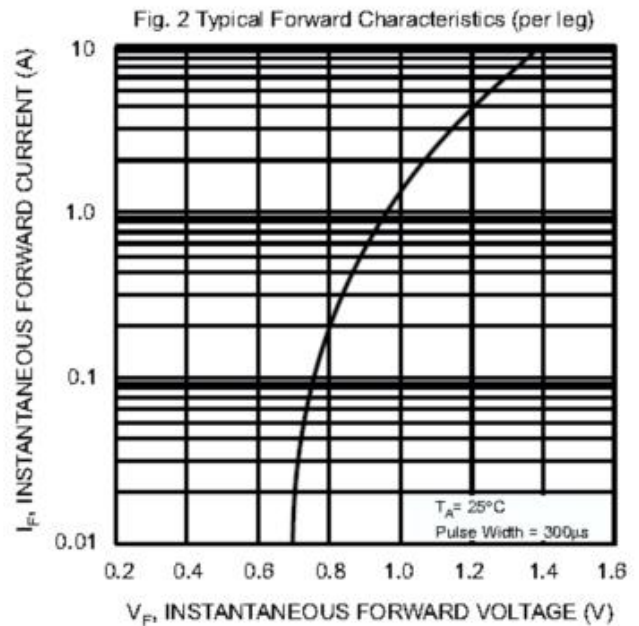
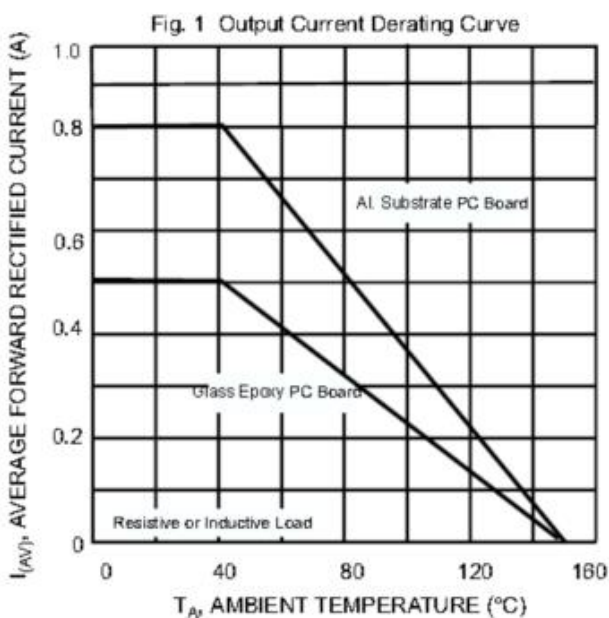
* Pulse width < 300 μs, duty cycle < 2%

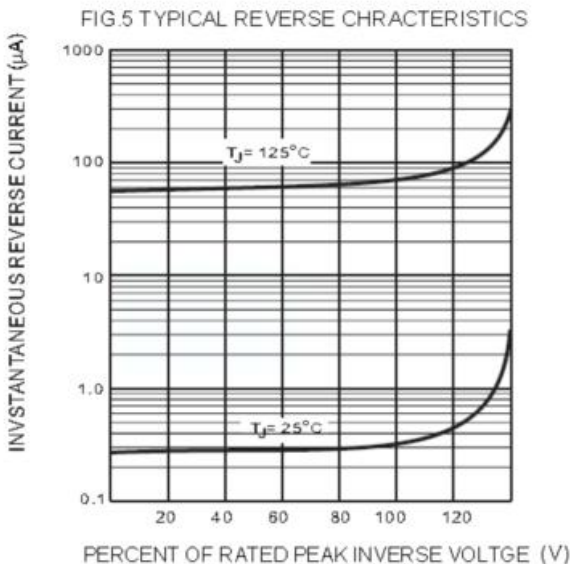
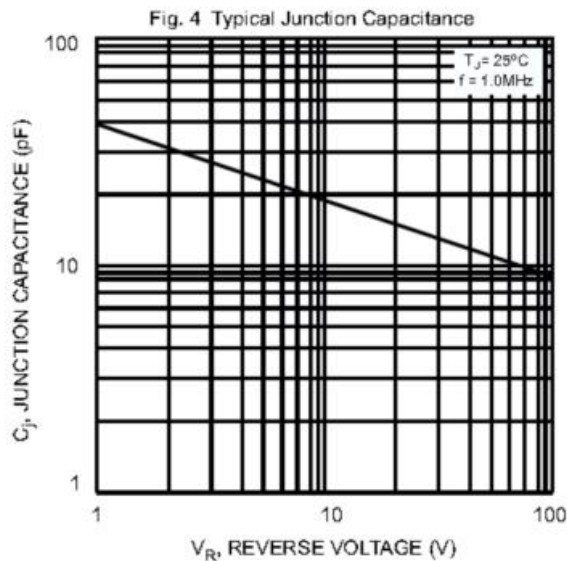
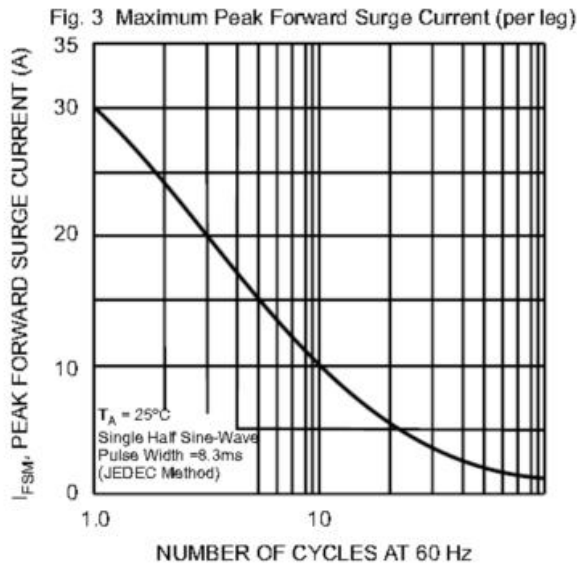
Thermal-Mechanical Specifications: @T_A=25°C unless otherwise specified

Type Number	Symbol	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Units
Typical Thermal Resistance per leg	R _{θJA}				60				°C/W
	R _{θJL}				16				
Operating Junction and Storage Temperature Range	T _J , T _{STG}				-55+150				°C

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Thermal REsistance From Junction to Ambient

Ratings and Characteristics Curves



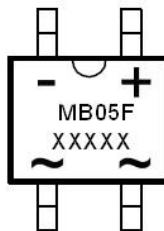


Ordering Information

Device	Package	Shipping
MB05F THRU MB10F	MBF (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

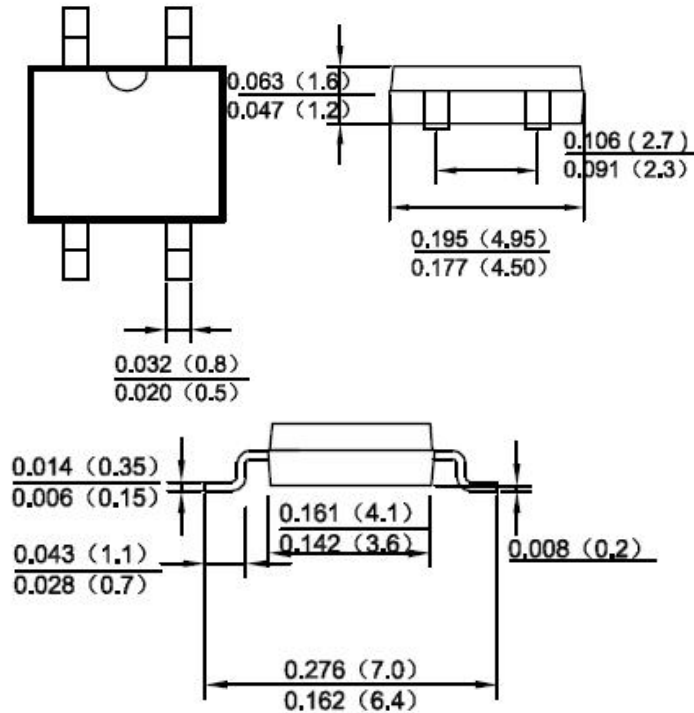


Where XXXXX is YYWWL

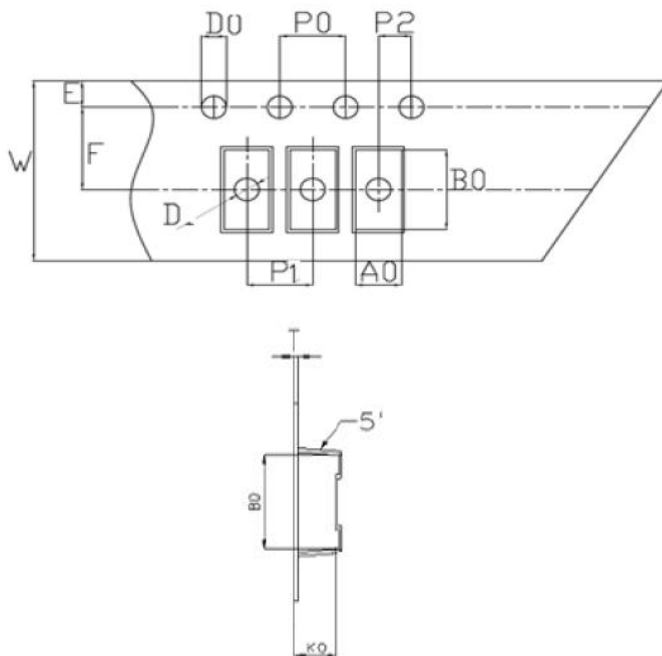
MB05F = Type Number
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Mechanical Dimensions MBF(Inches/Millimeters)



Carrier Tape & Reel Specification MBF



SYMBOL	Millimeters	
	Min.	Max.
A0	5.21	5.41
B0	7.10	7.30
D0	1.50	1.60
D1	1.40	1.60
P0	3.90	4.10
P1	7.90	8.10
P2	1.95	2.05
E	1.65	1.85
K0	1.55	1.75
F	5.45	5.55
W	11.90	12.10
T	0.24	0.30
10P0	39.80	40.20

**Technical Data
Data Sheet N1456, Rev. B**



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