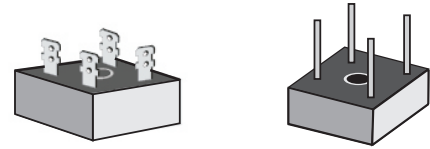




**10.0A ~ 50.0A Single-Phase Silicon  
 Bridge Rectifiers - 50V-1000V**



<p><b>MB-35T (KBPC-T)</b></p> <p>Unit :inch(mm)</p>	<p><b>MB-35W (KBPC-W)</b></p> <p>Unit :inch(mm)</p>	<p><b>MB-35TN (KBPC-TN)</b></p> <p>Unit :inch(mm)</p>
<p><b>Marking Instructions</b></p> <p>STL: Manufacturer's Logo        MB35xx: Device Number        xx=00, 01, 02, 04, 06, 08, 10        Polarity: As Marked on Body        DDD: Date Code</p>	<p><b>Circuit Diagram</b></p>	<p><b>MB-35WN (KBPC-WN)</b></p> <p>Unit :inch(mm)</p>

**FEATURES & MECHANICAL DATA**

- Low forward drop voltage & reverse leakage current
- Integrally molded heatsink provides very low thermal resistance for maximum heat dissipation
- High forward surge current capabilities
- Open Junction chip cells inside
- High case dielectric strength over 2500V
- Universal 2-way terminals for selection, faston terminals & wire leads
- Optional standard & low profile metal cases
- Pb-free parts for green partner
- Case: Metal square MB case
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD- 750 Method 2026
- Polarity: As marked on the side body
- Mounting Position: Hole thru for #10 screw (Note A)
- Mounting Torque: 20 in-lb (23 cm-kg). max.
- Weight: MB-35W, 0.98 ounce, 28 grams  
 MB-35T, 1.05 ounce, 30 grams

**ORDER INFORMATION**

**MB 10 01 - T N**

- Case Profiles,  
 N: low profile case  
 none for standard one
- Lead Types,  
 T : faston terminals  
 W : wire leads
- Maximum Reverse Voltage,  
 00: 50V 01: 100V 02: 200V  
 04: 400V 06: 600V 08: 800V  
 10: 1000V 12: 1200V
- Forward Rectified Output Current,  
 10: 10.0A 15: 15.0A 25: 25.0A  
 35: 35.0A 40: 40.0A 50: 50.0A

Note A. Bolt down heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS										
Ratings at 25°C ambient temperature unless otherwise specified										
MBXX, XX=10, 15, 25, 35, 40 or 50	Symbols	MB xx00	MB xx01	MB xx02	MB xx04	MB xx06	MB xx08	MB xx10	Units	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Output Current (See Fig. 1)	MB10 MB15 MB25 MB35 MB40 MB50	I(AV)						10.0 15.0 25.0 35.0 40.0 50.0	Amps	
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	MB10 MB15 MB25 MB35 MB40 MB50	IFSM						200 300 300 400 400 450	Amps	
Rating (Non-Repetitive, for t greater than 1ms and less than 8.3ms) for fusing	MB10 MB15 MB25 MB35 MB40 MB50	I <sup>2</sup> t						160 375 375 660 660 800	A <sup>2</sup> sec	
Maximum Instantaneous Forwarded Voltage Drop Per Leg at	MB10 MB15 MB25 MB35 MB40 MB50	IF= 5.0A IF= 7.5A IF=12.5A IF=17.5A IF=20.0A IF=25.0A	VF						1.1	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	TA= 25°C TA=100°C	IR						5.0 500.0	µA	
RMS Isolation Voltage from Case to Leads	VISO						2500	Volts		
Typical Junction Capacitance (Note 1)	MB10 MB15-25 MB35-50	CJ						200.0 300.0 400.0	pF	
Typical Thermal Resistance Per Leg (Note 2)	MB10 MB15-25 MB35-40 MB50	RθJC						3.0 2.6 2.1 1.6	°C/W	
Operating Junction Temperature Range	TJ						-55 ~ +125	°C		
Storage Temperature Range	TSTG						-65 ~ +150	°C		

Note 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts  
 2. Thermal resistance from junction to case per leg with unit mounted on 220x220x50mm Al plate heatsink.  
 3. Special design for reverse voltage over 1000V per customer's requirement.

