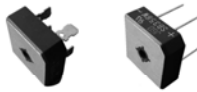


# MP15, 25, 35, 50 SERIES

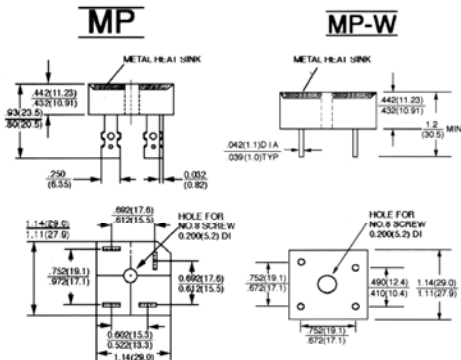
## HIGH CURRENT 15, 25, 35, 50 AMPS SINGLE PHASE BRIDGE RECTIFIERS



### FEATURES

- \* The plastic material used carries Underwriters Laboratory flammability" recognition 94V - 0
- \* Integrally molded heatsink provide very low thermal resistance for maximum heat dissipation
- \* Surge overload ratings from 300 Ampere to 400 Amperes
- \* Terminals solderable per MIL - STD - 202. Method 208 (For wire type)
- \* Typical IR less than 0.2  $\mu$ A
- \* High temperature soldering guaranteed (For wire type) : 250°C/5 seconds/ .375" (9.5mm) lead length
- \* Isolated Voltage from case to terminal over 2500 volts

**VOLTAGE RANGE**  
**50 to 1000 Volts**  
**CURRENT**  
**15, 0/25, 0/35, 0/50, 0 Amperes**



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	-00	-01	-02	-04	-06	-08	-10	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum D. C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current at $T_c = 55^\circ\text{C}$ (See Fig. 1)	$I_{F(AV)}$				15.0				A
Peak Forward Surge Current Single sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$				300				A
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current	$V_F$				1.10				V
Maximum Reverse DC Current at Rated D. C Blocking Voltage per Element	$I_R$				10.0				$\mu$ A
Typical Thermal Resistance <sup>(1)</sup>	$R_{UC}$				1.5				$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J/T_{STG}$				- 50 to + 125/ - 50 to + 150				$^\circ\text{C}$

- Notes: 1. Thermal Resistance from Junction to Case per leg.  
 2. Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with # 10 screw  
 3. Suffix "W" - Wire Lead Structure.

## HV COMPONENT ASSOCIATES

P.O. Box 848 Farmingdale, NJ 07727  
 Tel: 732.938.4499 FAX: 732.938.4451  
[www.hvca.com](http://www.hvca.com)



**RATINGS AND CHARACTERISTIC CURVES** (MP1500 MP1510  
MP2500 THRU MP2510  
MP3500 MP3510  
MP5000 MP5010)

FIG. 1 – TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE

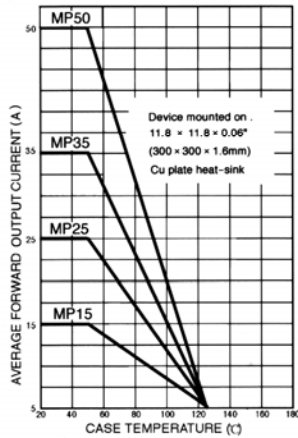


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT – PER ELEMENT

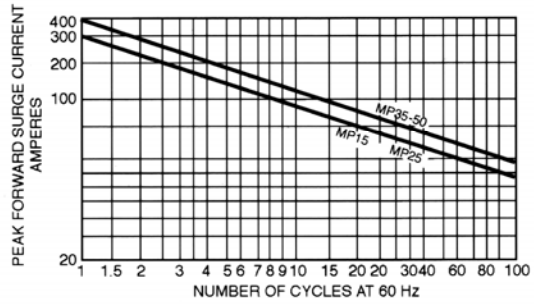


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

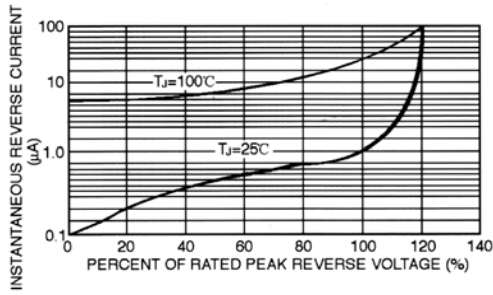
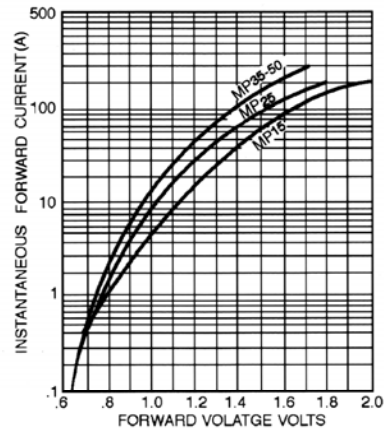


FIG. 4 – TYPICAL FORWARD CHARACTERISTICS – PER ELEMENT



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