

MP15, 25, 35, 50 SERIES

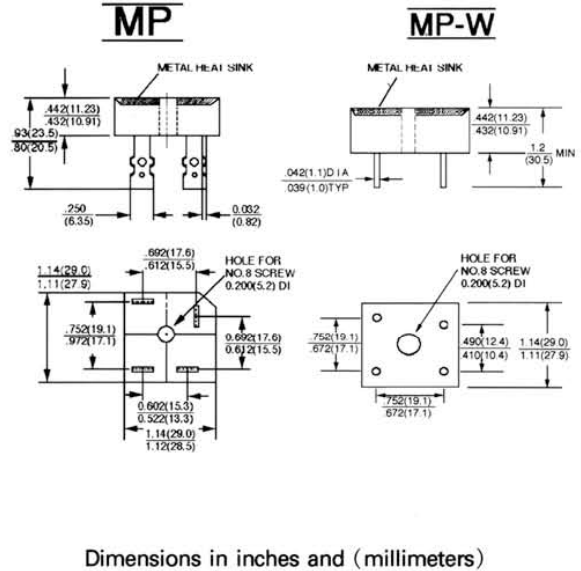
HIGH CURRENT 15, 25, 35, 50 AMPS SINGLE PHASE BRIDGE RECTIFIERS



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 μ 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



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	25.0	35.0	50.0	A
Peak Forward Surge Current Single sine-wave superimposed on rated load (JEDEC method)	I_{FSM}				300	300	400		A
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current	V_F	MP15 7.5A MP25 12.5A MP35 17.5A MP50 25.0A			1.10				V
Maximum Reverse DC Current at Rated D. C Blocking Voltage per Element	I_R				10.0				μ A
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JC}$				1.5				$^\circ\text{C/W}$
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



RATINGS AND CHARACTERISTIC CURVES (MP1500 THRU MP5010)

FIG. 1 – TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE

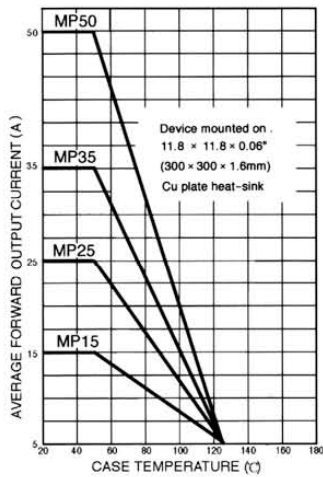


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT – PER ELEMENT

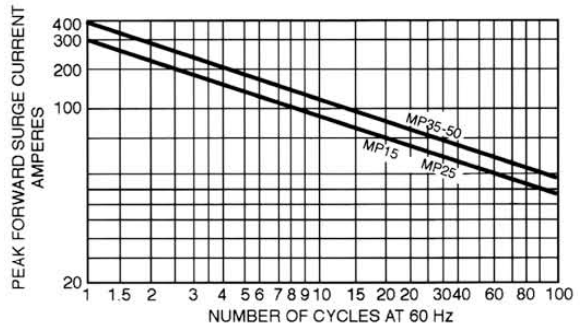


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

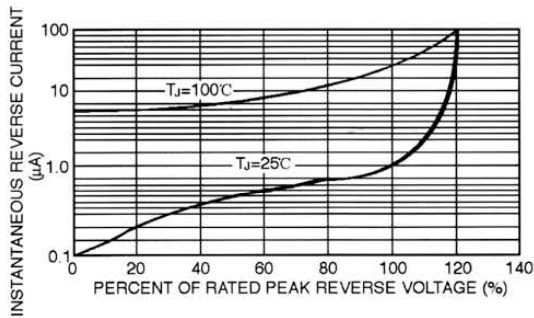
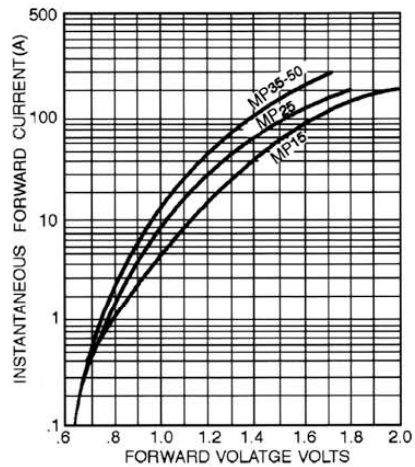


FIG. 4 – TYPICAL FORWARD CHARACTERISTICS – PER ELEMENT



HV COMPONENT ASSOCIATES

P.O. Box 848 Farmingdale, NJ 07727
Tel: 732.938.4499 FAX: 732.938.4451
www.hvca.com

