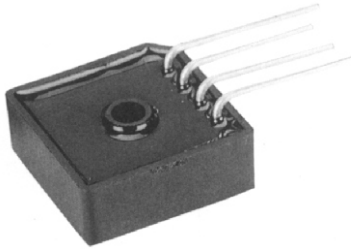


# MP15,25,35, S SERIES

15/25/35 AMPS.  
SILICON BRIDGE RECTIFIERS



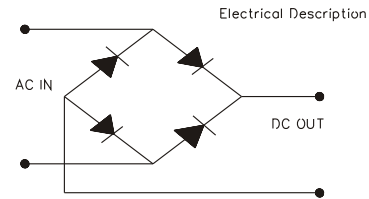
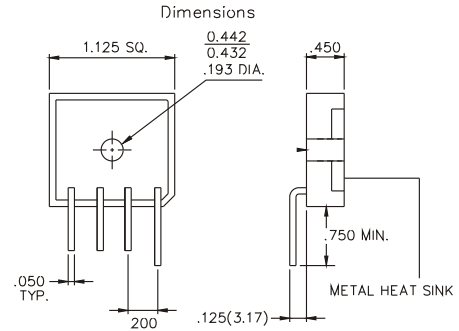
**CHENG-YI  
ELECTRONIC**



## FEATURES

- The plastic material used carries Underwriters Laboratory flammability recognition 94v-0
- Integrally molded heats provide very low thermal resistance for maximum heat dissipation.
- Universt 4-way terminals; snap-on, wraparound, solder or P.C.board mounting
- Surge overload rating to 400 Amperes
- Terminals solderable per MIL-STD-202, Method 208
- Typical Soderable guaranteed: 250oC/10 second/.375"
- solt Voltage from case to terminal over 2500 volts

VOLTAGE RANGE  
50 TO 1000 VOLTS PRV  
CURRENT  
15.25.35. Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

MP 15/25/35 S		MP005S	MP01S	MP02S	MP04S	MP06S	MP08S	MP10S	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ $T_C=55^\circ C$	$V_{(AV)}$	15 KBPC25S 35			15 25 35				A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Mehtod)	$I_{FSM}$	15 25 35			250 300 400				A
Maximum Forward Voltage per Bridge element	$V_F$	15 KBPC25S at IF 35			7.5A 12.5A 17.5A	11			V
Maximum DC Reverse Current at Rated DC	$I_R$	@ $T_A=25^\circ C$ @ $T_A=100^\circ C$			10 500				$\mu A$
Blocking Voltage per Bridge element									$\mu A$
$I^2 t$ Rating for fusing ( $t < 8.3ms$ )	$I^2 t$				374/664				A <sup>2</sup> S
Typical Thermal Resistance(Note.1)	$R\theta_{JC}$				2.0				$^\circ C/W$
Operating Temperature Range	$T_J$				-55 to +125				$^\circ C$
Storage Temperature Range	$T_{STG}$				-55 to +150				$^\circ C$

NOTE: 1. Mounted on a 11.8in<sup>2</sup> X 0.06 in thick (300mm<sup>2</sup> X 1.5mm thick ) Copper plate.  
2. Fast Recovery, Controlled avalanche bridges are available. Please consult with factory.

# MP15,25,35, S SERIES

15/25/35 AMPS.  
SILICON BRIDGE RECTIFIERS



CHENG-YI  
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## RATING AND CHARACTERISTICS CURVES MP15,25,35,S SERIES

Fig. 1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

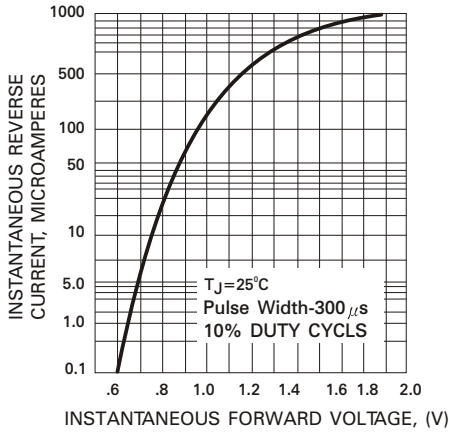


Fig. 4 - MAXIMUM POWER DISPATION

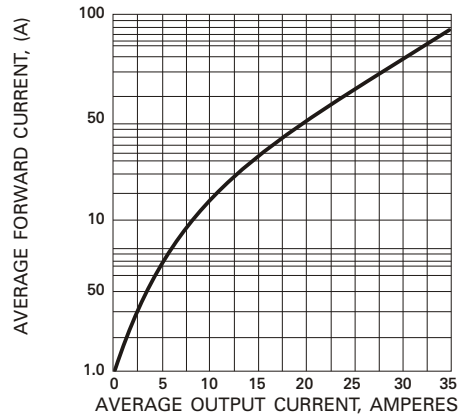


Fig. 2 - MAXIMUM OUTPUT RECTIFIED CURRENT

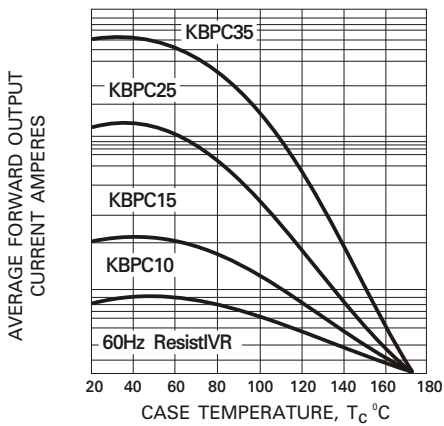


Fig. 5 - TYPICAL REVERSE CHARACTERISTICS AT  $T_J = 25^\circ\text{C}$

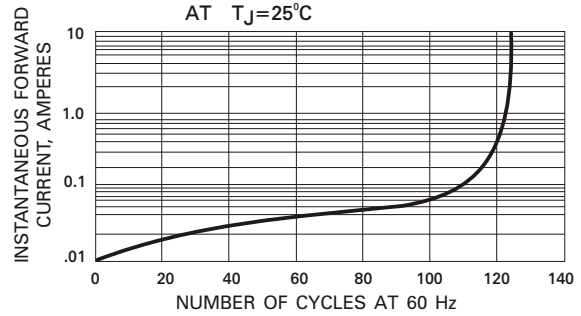


Fig. 3 - MAXIMUM OUTPUT RECTIFIED CURRENT

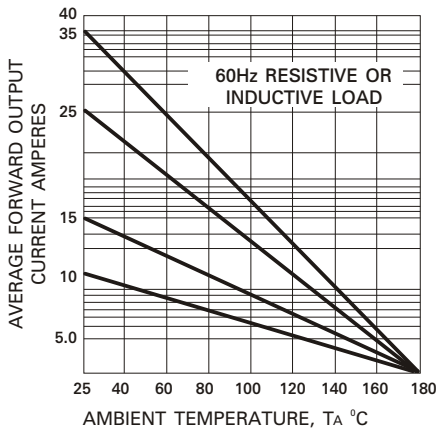


Fig. 6 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

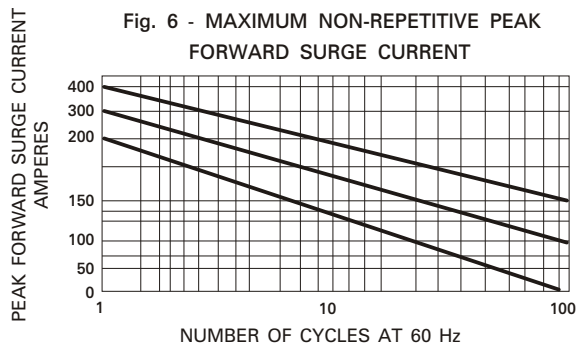


Fig. 7 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

