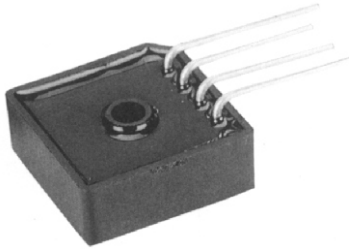


# MP40,50S SERIES

## 40,50S IN-LINE BRIDGE RECTIFIER



**CHENG-YI  
ELECTRONIC**

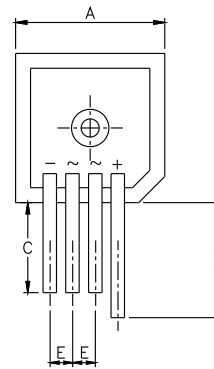


### FEATURES

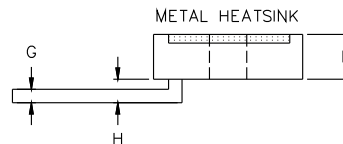
- Diffused Junction
- Low Forward Voltage Drop
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Designed for Saving Mounting Space
- UL Recognized File #E157705

### MECHANICAL DATA

- Cass: Epoxy Cass With Heat Sink Internally Mounted in Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 30 grams (approx.)
- Mounting: Position: Any
- Marking: Type Number



MP40,50S		
Dim	Min	Max
A	28.40	28.70
B	10.97	11.23
C	13.90	—
D	19.10	—
E	5.10	—
G	1.20 $\varnothing$ Typical	
H	3.05	3.60
All Dimensioas in mm		



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristics	Symbol	-00S	-01S	-02S	-04S	-06S	-08S	-10S	UNIT	
Peak Repetitive Reverse Voltage	$V_{RRM}$								V	
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000		
DC Blocking Voltage	$V_R$									
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V	
Average Rectifier Output Current @ $T_C=55^\circ\text{C}$	$I_O$					40 50				A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Mehtod)	$I_{FSM}$					400 400				A
Forward Voltage Drop (per element) KBPC40 @ $I_L=20\text{A}$ KBPC50 @ $I_L=25\text{A}$	$V_{FM}$					1.2				V
Peark Reverse Current at Rated DC Blocking Voltage (per element)	$I_R$					10 1.0				$\mu\text{A}$ mA
Typical Thermal Resistance (per element) (Note 2)	$R\theta_{JC}$					1.5				K/W
RMS Isolation Voltage from Cass to Lead	$V_{ISO}$					2500				V
Operating and Storage Temperature Range	$T_J, T_{STG}$					-55 to +150				$^\circ\text{C}$

NOTE: 1. Thermal resistance junction to cass per element mounted on 8" x 8" x 25" thick AL plate.

# MP40,50S SERIES

## 40,50S IN-LINE BRIDGE RECTIFIER



**CHENG-YI  
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### RATING AND CHARACTERISTICS CURVES MP40,50S SERIES

Fig. 1 Forward Current Derating Curve

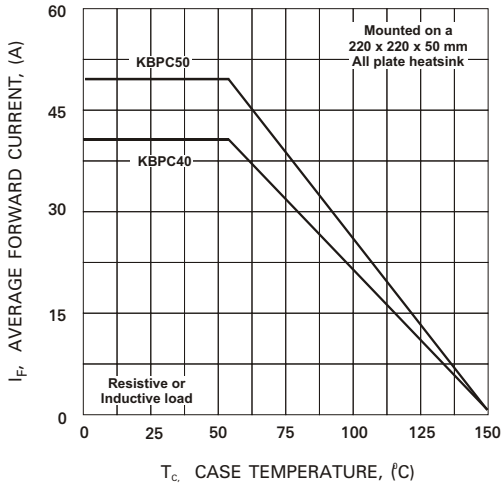


Fig. 2 Typical Forward Characteristics (per element)

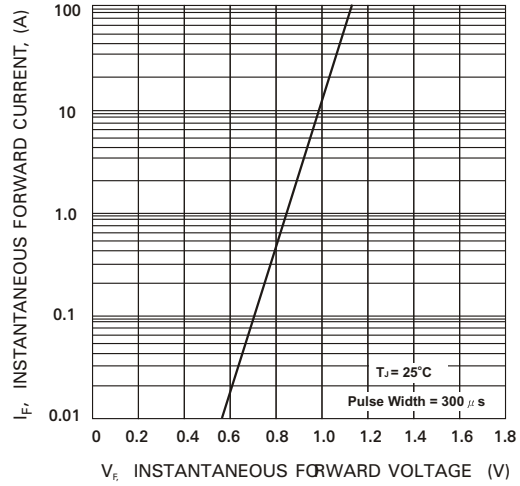


Fig. 3 Max Non-Repetitive Surge Current

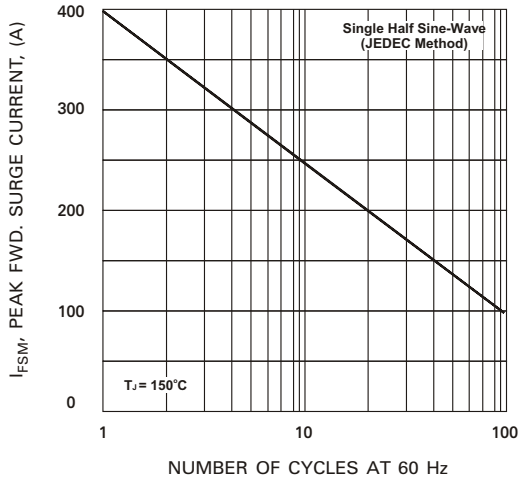


Fig. 4 Typical Junction Characteristics (per element)

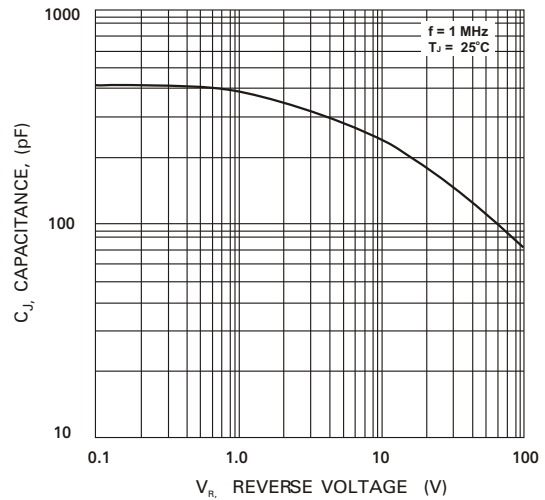


Fig. 5 Typical Reverse Characteristics (per element)

