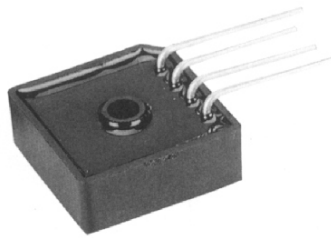


MP40,50S SERIES

40,50S IN-LINE BRIDGE RECTIFIER

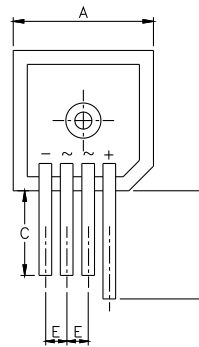


FEATURES

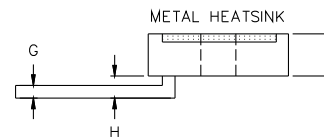
- Diffused Junction
- Low Forward Voltage Drop
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Designed for Saving Mounting Space
- UL Recognized File #E157705

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 ∅ Typical	
H	3.05	3.60
All Dimensions 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			40 50				A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	I_{FSM}	40 50			400 400				A
Forward Voltage Drop (per element)	V_{FM}	KBPC40 @ $I_f=20\text{A}$ KBPC50 @ $I_f=25\text{A}$			1.2				V
Peak Reverse Current at Rated DC Blocking Voltage (per element)	I_R				10 1.0				μA mA
Typical Thermal Resistance (per element) (Note 2)	$R_{\theta JC}$				1.5				K/W
RMS Isolation Voltage from Case 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
ELECTRONIC**

RATING AND CHARACTERISTICS CURVES MP40,50S SERIES

Fig. 1 Forward Current Derating Curve

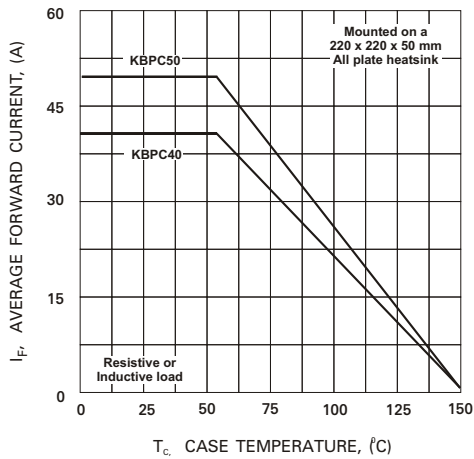


Fig. 2 Typical Forward Characteristics (per element)

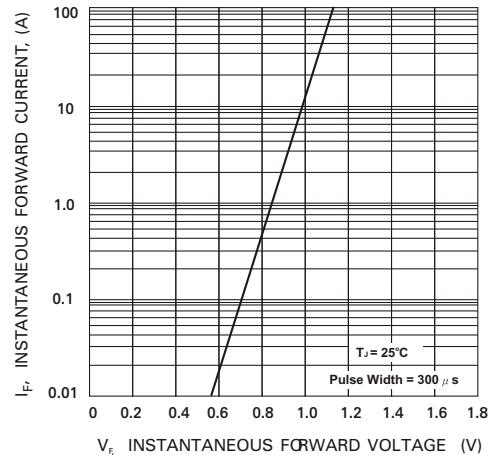


Fig. 3 Max Non-Repetitive Surge Current

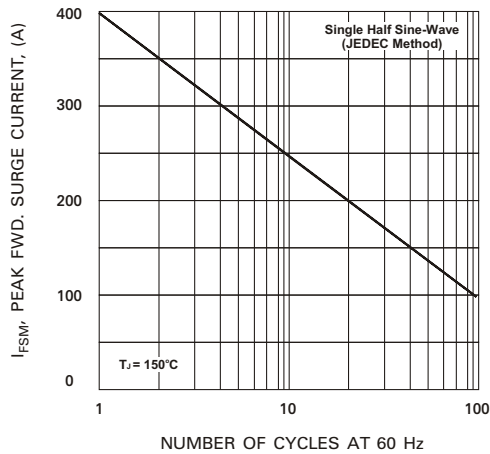


Fig. 4 Typical Junction Characteristics (per element)

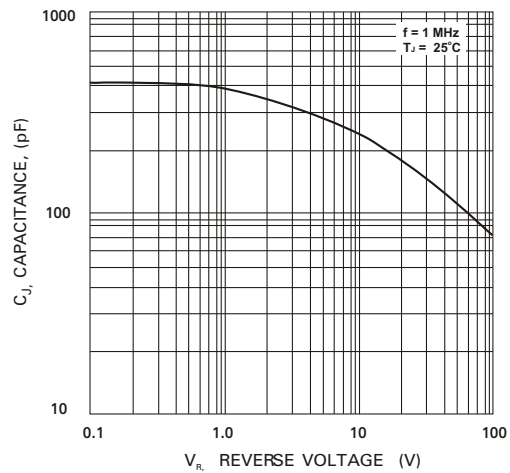


Fig. 5 Typical Reverse Characteristics (per element)

