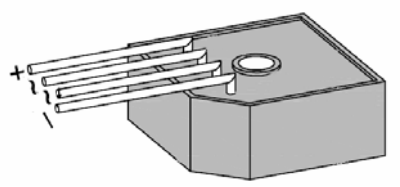
40A Single-Phase in-line Bridge Rectifier

Features

- Low Forward Voltage Drop
- High Current Capability, High Reliablity
- High Surge Current Capability
- Designed for Saving Mounting Space
- RoHS Compliant



KBPCS
(Plastic Case with Metal Heat Sink)

Mechanical Data

Case:	KBPCS, molded plastic with heatsink internally mounted in the bridge encapsulation
Terminals:	Plated leads solderable per MIL-STD-202, method 208
Polarity:	As marked on body
Mounting:	Through hole with #10 screw
Mounting Torque:	23 cm-kg (20 in-lbs) Max.
Weight:	21grams

Maximum Ratings And Electrical Characteristics (T_{amb}=25˚C)

Symbol	Description	KBPC40 -005S	KBPC40 -01S	KBPC40 -02S	KBPC40 -04S	KBPC40 -06S	KBP40 -08S	KBPC40 -10S	Unit	Conditions
V_{RRM}	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
V_{RMS}	Max. RMS Voltage	35	70	140	280	420	560	700	V	
V_{DC}	Max. DC blocking voltage	50	100	200	400	600	800	1000	V	
I_O	Average Rectified Output Current	40							A	T_A=60˚C
I_{FSM}	Non-Repetitive Peak Forward Surge Current	400							A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)

Symbol	Description	KBPC40 -005S	KBPC40 -01S	KBPC40 -02S	KBPC40 -04S	KBPC40 -06S	KBP40 -08S	KBPC40 -10S	Unit	Conditions
V_{FM}	Forward Voltage per leg	1.1							V	I_O=20A
I_{RM}	Max. Reverse DC Current At Rated DC Blocking Voltage per leg	10							µA	T_C = 25°C
		500							µA	T_C = 125°C
I^2t	Rating for Fusing (t<8.3ms)	664							A^2s	
C_J	Typical junction capacitance per leg	400							pF	f=1MHz , V_R= 4V
Rth_{JC}	Typical Thermal Resistance per leg	2.1							°C / W	Note
V_{ISO}	RMS Isolation Voltage from Case to Leads	2500							V	
T_J,T_{STG}	Operating Junction and Storage Temperature Range	-65 to +150							° C	

Note: Thermal Resistance junction to case, mounted on heatsink.

Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

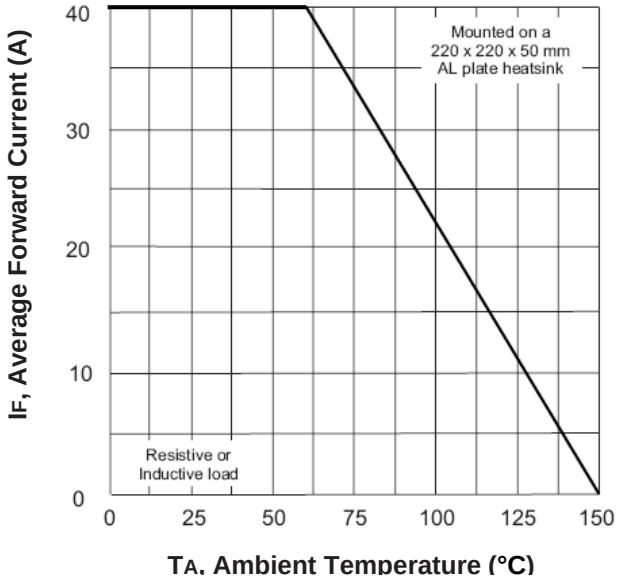


Fig.2-Max. Non-repetitive Peak Forward Surge Current Per Leg

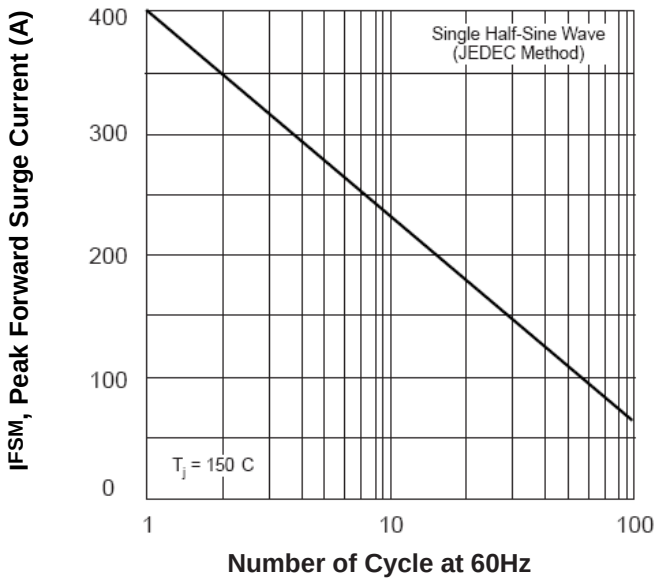


Fig.3-Typical Instantaneous Forward Characteristic Per Leg

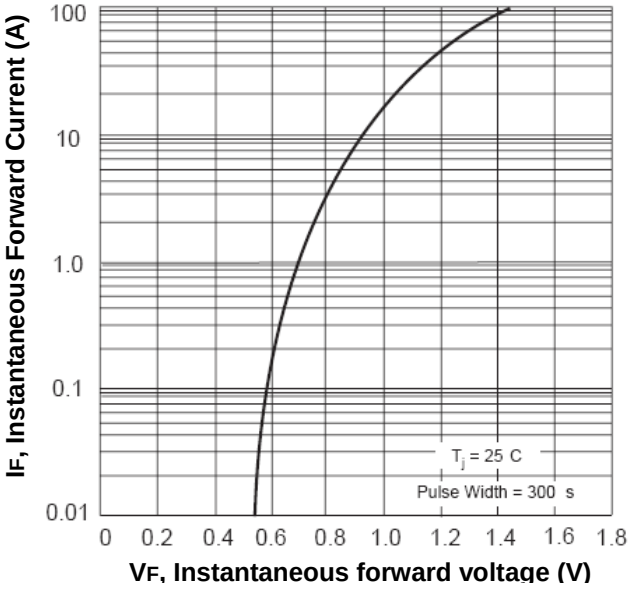


Fig.4-Typical Reverse Characteristics Per Leg

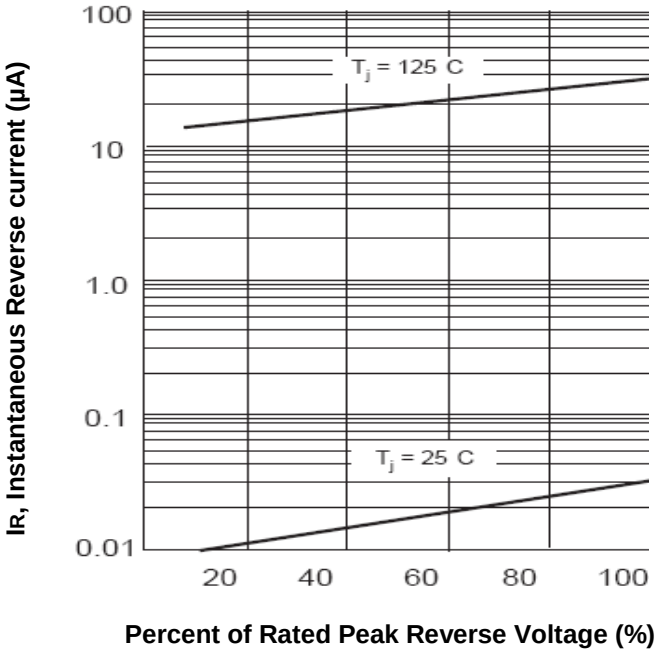
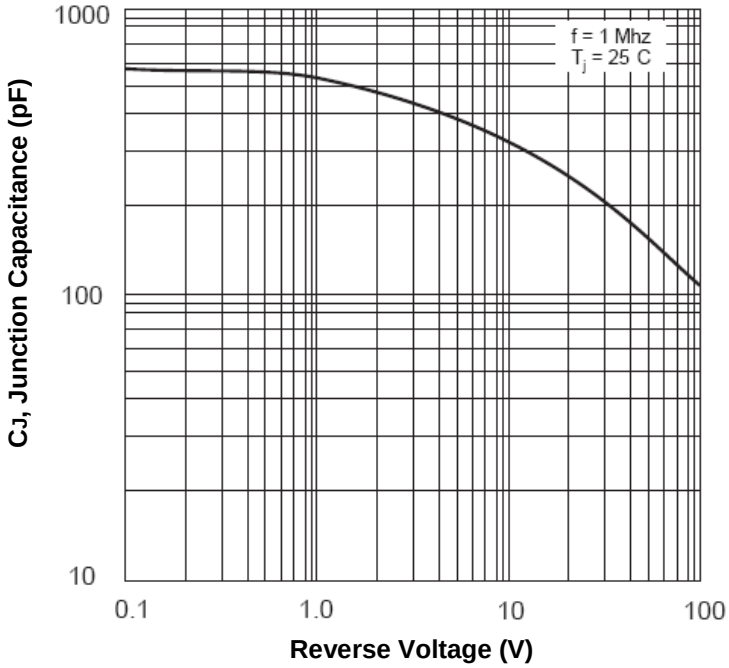
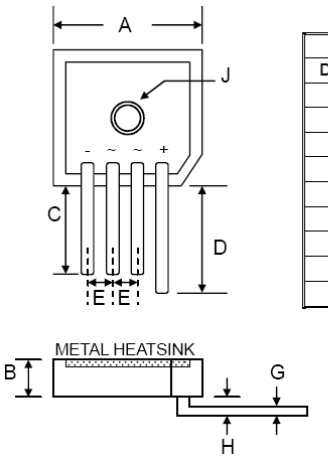


Fig.5-Typical Junction Capacitance Per Leg



Dimensions in inch (mm)



KBPC-S		
Dim	Min	Max
A	28.40	28.70
B	10.97	11.23
C	—	21.00
D	—	25.00
E	5.10	—
G	1.20 Ø Typical	
H	3.05	3.60
J	5.08 Ø Nominal	
All Dimensions in mm		

KBPCS

How to contact us:

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162
Tel: (800) TAITRON (800) 824-8766 (661) 257-6060
Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415
Email: taitron@taitroncomponents.com
Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P. 42970 MEXICO
Tel: +52-55-5560-1519
Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL
Tel: +55-11-5574-7949
Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

CROSS REGION PLAZA, 899 LINGLING ROAD, SUITE 18C, SHANGHAI, 200030, CHINA
Tel: +86-21-5424-9942
Fax: +86-21-5424-9931