



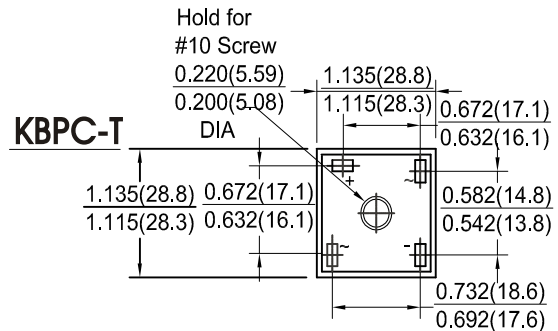
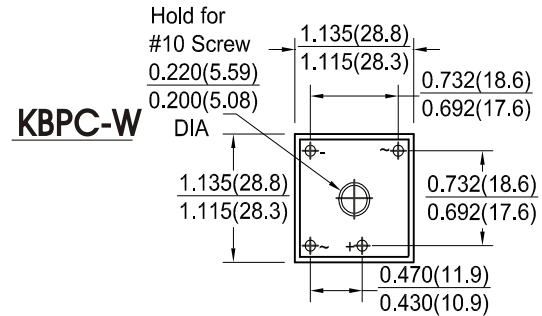
**SINGLE PHASE SILICON BRIDGE RECTIFIER**

**FEATURES:**

- High efficiency
- Silicon Junction
- Metal case
- Rating to 1000 V PRV

**MECHANICAL DATA**

**Case :** Mounted In the bridge encapsulation  
**Polarity :** As marked on case  
**Mounting :** Hole for #10 screw



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

Characteristic	Symbol	KBPC							Units
		50005 T/W	5001 T/W	5002 T/W	5004 T/W	5006 T/W	5008 T/W	5010 T/W	
	Marking	KBCP 50005	KBPC 5001	KBPC 5002	KBPC 5004	KBPC 5006	KBPC 5008	KBPC 5010	
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_c=40^\circ C$	$I_o$	50							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) Per leg	$I_{FSM}$	400							Amps
Maximum instantaneous forward voltage Per leg $I_F=25.0A$	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage Per leg $T_c=25^\circ C$ $T_c=100^\circ C$	$I_R$	5.0 500							$\mu A$
Typical thermal resistance Per leg(NOTE1)	$R_{th-JA}$	2.5							$^\circ C/W$
Operating junction and Storage temperature range	$T_J, T_{Stg}$	-55to+150							$^\circ C$

NOTES:

(1) Thermal resistance from Junction to Ambient on P.C. board mounting



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

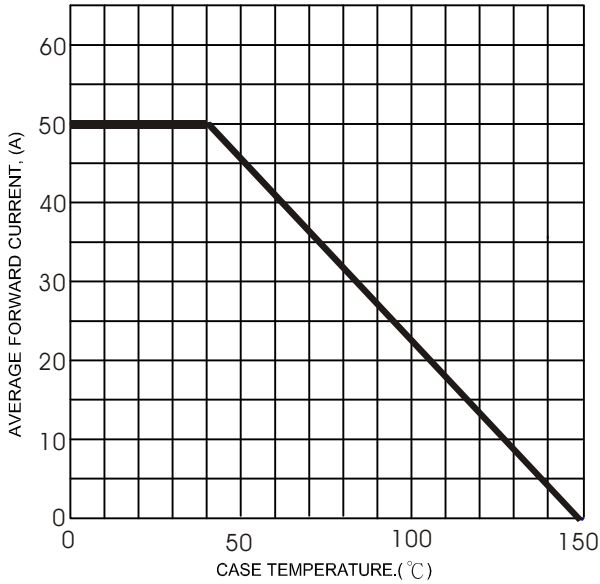


FIG.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

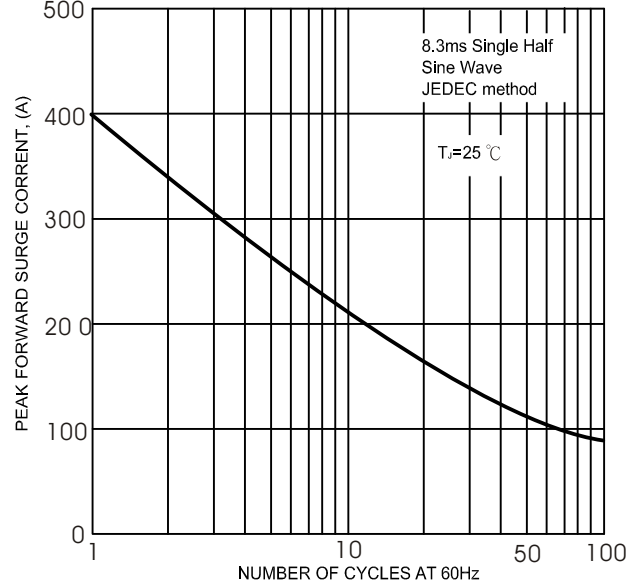


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

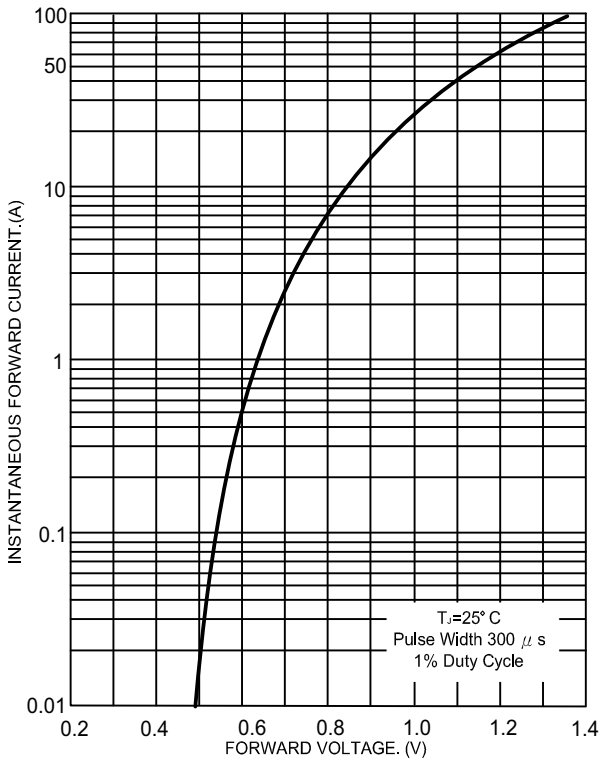
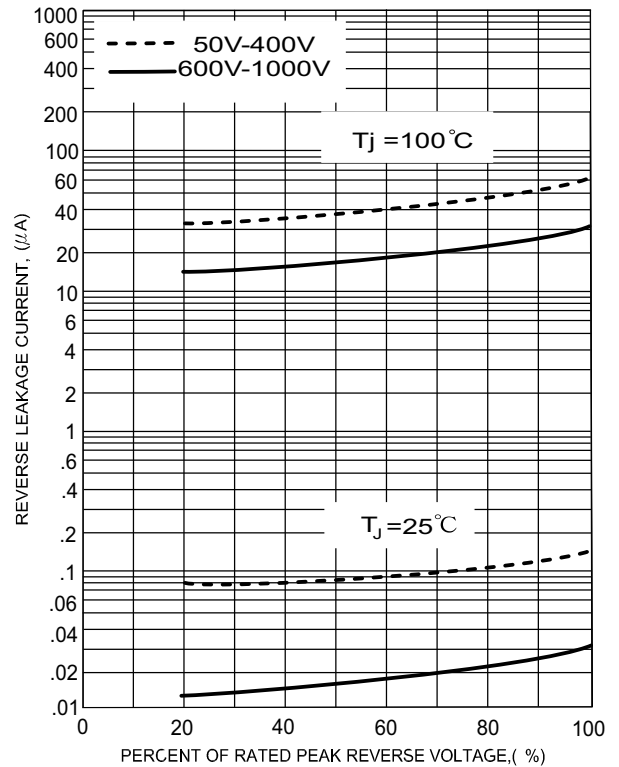
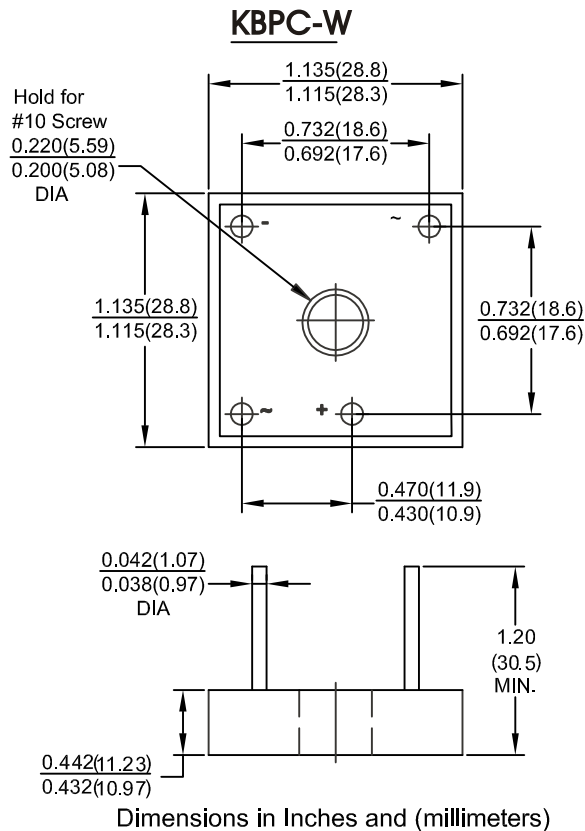
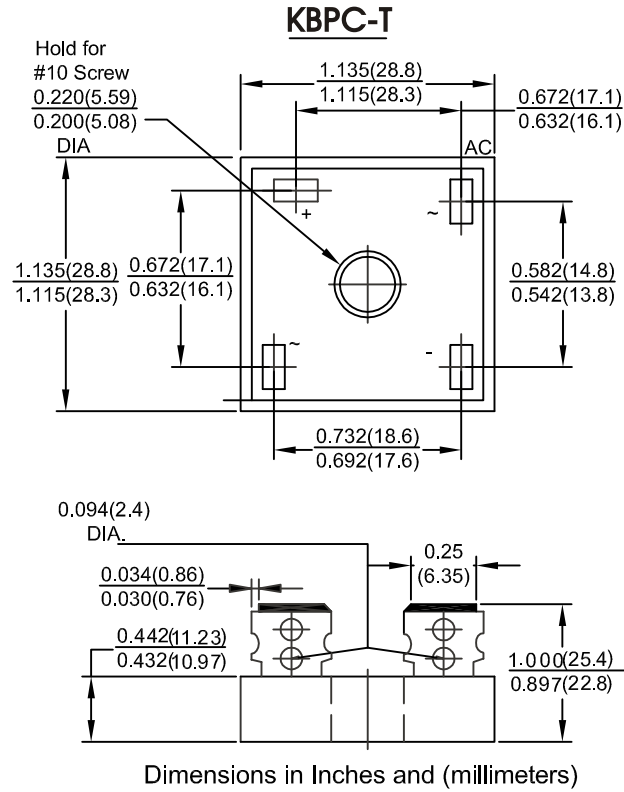


FIG.4 - TYPICAL REVERSE CHARACTERISTICS





RATINGS AND CHARACTERISTIC CURVES





## **Disclaimer**

DACO Semiconductor reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein.

DACO Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does DACO Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

Purchasers is responsible for its products and applications using DACO Semiconductor products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by DACO Semiconductor. "Typical" parameters which may be provided in DACO Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts.

DACO Semiconductor products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of DACO Semiconductor's product can reasonably be expected to result in personal injury, death or severe property or environmental damage. DACO Semiconductor accept no liability for inclusion and/or use of DACO Semiconductor's products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Purchasers buy or use DACO Semiconductor products for any such unintended or unauthorized application, Purchasers shall indemnify and hold DACO Semiconductor and its suppliers and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that DACO Semiconductor was negligent regarding the design or manufacture of the part.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of DACO Semiconductor Co., Ltd.