

25A, 50V - 1000V Glass Passivated Bridge Rectifiers

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- Typical I_{R} less than $0.1 \mu \text{A}$
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21









MECHANICAL DATA

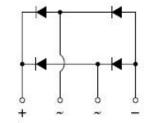
Case: TS-6P

Molding compound, UL flammability classification rating 94V-0 Packing code with suffix "G" means green compound (halogen-free)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test **Polarity:** Polarity as marked on the body **Mounting torque:** 8.17 in-lbs. maximum

Weight: 7.15 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)						
PARAMETER	SYMBOL	TS25P	TS25P	TS25P	TS25P	UNIT
		04G-K	05G-K	06G-K	07G-K	
		TS25P04G	TS25P05G	TS25P06G	TS25P07G	
Maximum repetitive peak reverse voltage	V_{RRM}	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	25				Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	350			Α	
Rating for fusing (t<8.3ms)	l ² t	508				A ² s
Maximum instantaneous forward voltage (Note 1) @ 12.5 A @ 25 A	V _F	1.0 1.1			V	
Maximum reverse current @ rated V_R T_J =25°C T_J =125°C	I _R	10 500			μΑ	
Typical thermal resistance	$R_{ heta JC}$	1			°C/W	
Operating junction temperature range	TJ	- 55 to +150		°C		
Storage temperature range	T _{STG}	- 55 to +150		°C		

Note 1: Pulse test with PW=300 μ s, 1% duty cycle



ORDERING INFORMATION					
PART NO.	PACKING CODE	PACKING CODE SUFFIX ^(*)	PACKAGE	PACKING	
TS25P0xG-K	C2	G	TS-6P	15 / TUBE	
(Note 1, 2)	D2		TS-6P	15 / TUBE	

Note 1: "x" defines voltage from 400V (TS25P04G-K) to 1000V (TS25P07G-K)

Note 2: Whole series with green compound

EXAMPLE						
EXAMPLE	PART NO.	PACKING CODE	PACKING CODE	DESCRIPTION		
PART NO.	PART NO.	PACKING CODE	SUFFIX	DESCRIPTION		
TS25P07G-K C2G	TS25P07G-K	C2	G	Green compound		

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

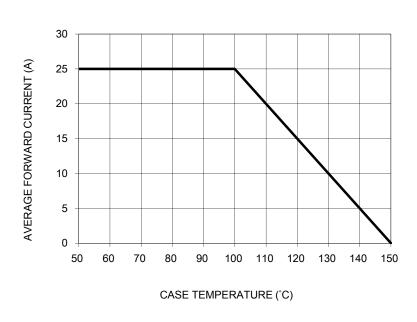


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

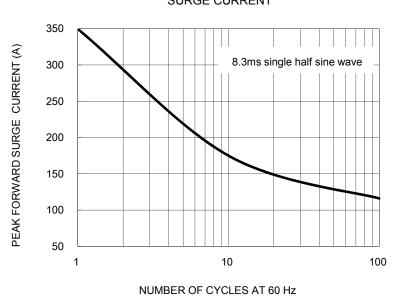


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

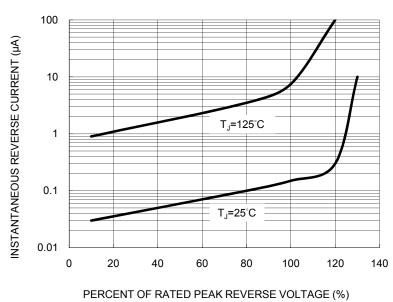


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

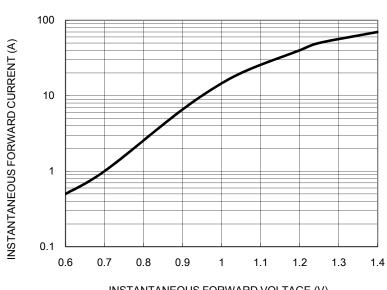
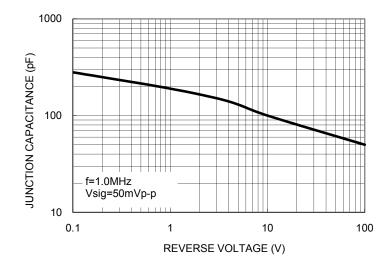


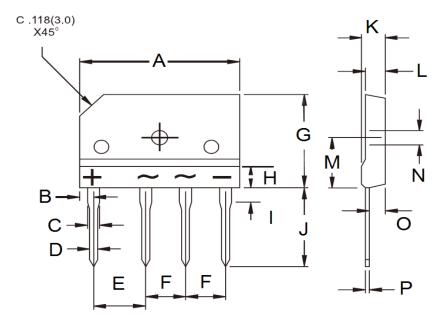


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS

TS-6P



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	Min	Max	Min	Max	
Α	29.70	30.30	1.169	1.193	
В	2.30	2.70	0.091	0.106	
С	2.00	2.40	0.079	0.094	
D	0.90	1.10	0.035	0.043	
E	9.80	10.20	0.386	0.402	
F	7.30	7.70	0.287	0.303	
G	19.70	20.30	0.776	0.799	
Н	-	4.80	1	0.189	
I	3.80	4.20	0.150	0.165	
J	17.00	18.00	0.669	0.709	
K	4.40	4.80	0.173	0.189	
L	3.40	3.80	0.134	0.150	
М	10.80	11.20	0.425	0.441	
Ν	3.10	3.40	0.122	0.134	
0	2.50	2.90	0.098	0.114	
Р	0.60	0.80	0.024	0.031	

MARKING DIAGRAM



P/N = Marking code G = Green Compound YWW = Date Code

F = Factory Code



Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

Version: A1601