

# 10A, 400V - 800V Glass Passivated Bridge Rectifiers

### **FEATURES**

- Glass passivated junction
- Ideal for printed circuit board
- Typical IR less than 0.1µA
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



Case: TS4K

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free)

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

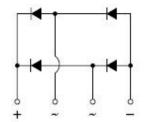
Meet JESD 201 class 2 whisker test **Polarity:** Polarity as marked on the body **Mounting torque:** 8.17 in-lbs maximum

Weight: 4 g (approximately)









TS4K

CTRICAL CHAR	ACTERIST	ICS (T <sub>A</sub> =25°C ι	ınless otherwise	noted)	
	SYMBOL	TS10K40	TS10K60	TS10K80	UNIT
Maximum repetitive peak reverse voltage		400	600	800	V
Maximum RMS voltage		280	420	560	V
Maximum DC blocking voltage		400	600	800	V
Maximum average forward rectified current		10			Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load		150		А	
Rating for fusing (t<8.3ms)		93		A <sup>2</sup> s	
<sub>F</sub> I <sub>F</sub> =5A I <sub>F</sub> =10A	V <sub>F</sub>	1.0 1.1			V
T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I <sub>R</sub>	10 500			μΑ
Typical thermal resistance		2.3			°C/W
Operating junction temperature range		- 55 to +150			°C
Storage temperature range		- 55 to +150		°C	
	rent yle half sine-wave  e I <sub>F</sub> =5A I <sub>F</sub> =10A T <sub>J</sub> =25°C	$\begin{array}{c c} & & SYMBOL \\ \hline v_{RRM} & & V_{RRM} \\ \hline v_{RMS} & & V_{DC} \\ \hline ent & & I_{F(AV)} \\ \hline ule half sine-wave & & I_{FSM} \\ \hline & & & I^2t \\ \hline e & I_F=5A & & V_F \\ \hline T_J=25^{\circ}C & & I_P \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

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



ORDERING INFORMATION						
PART NO.	PART NO.	PACKING	PACKING CODE	DACKACE	PACKING	
	SUFFIX	CODE	SUFFIX (*)	PACKAGE		
TS10Kxx	ш	D3	G	TS4K	20 / TUBE	
(Note 1)	''	X0		TS4K	Forming	

Note 1: "xx" defines voltage from 400V (TS10K40) to 800V (TS10K80)

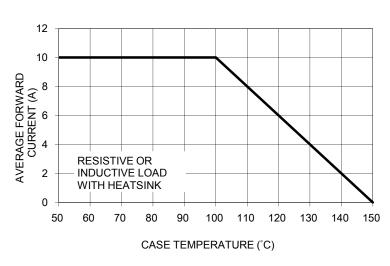
<sup>\*:</sup> Optional available

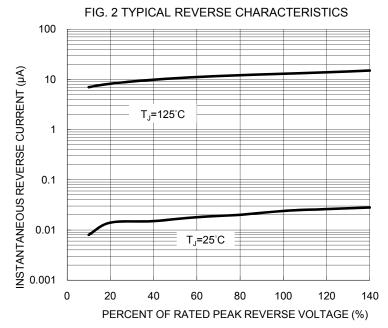
EXAMPLE						
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION	
TS10K80HD3G	TS10K80	Ħ	D3	G	AEC-Q101 qualified Green compound	

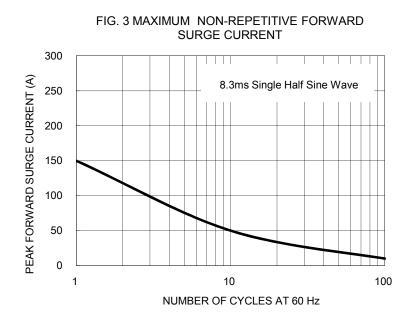
#### RATINGS AND CHARACTERISTICS CURVES

(T<sub>A</sub>=25°C unless otherwise noted)









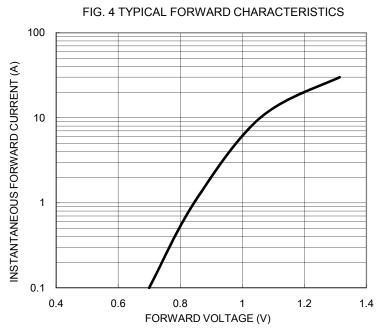
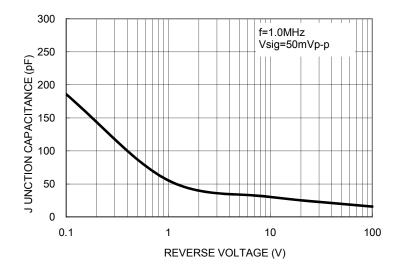


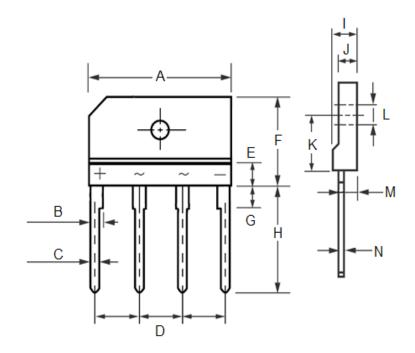


FIG. 5 TYPICAL JUNCTION CAPACITANCE



### PACKAGE OUTLINE DIMENSIONS

TS4K



DIM.	Unit	(mm)	Unit (inch)		
	Min	Max	Min	Max	
Α	24.70	25.30	0.972	0.996	
В	2.00	2.30	0.079	0.091	
С	0.90	1.10	0.035	0.043	
D	7.30	7.70	0.287	0.303	
Е	3.00	5.00	0.118	0.197	
F	14.70	15.30	0.579	0.602	
G	3.30	3.70	0.130	0.146	
Н	17.00	18.00	0.669	0.709	
- 1	4.40	4.80	0.173	0.189	
J	3.40	3.80	0.134	0.150	
K	9.30	9.60	0.366	0.378	
L	3.10	3.60	0.122	0.142	
М	3.10	3.40	0.122	0.134	
N	0.50	0.70	0.020	0.028	

## MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code

F = Factory Code





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