

10A, 50V - 1000V Glass Passivated Bridge Rectifiers

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength of 2000V_{RMS}
- Reliable low cost construction
- 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



TS4B



MECHANICAL DATA

Case: TS4B

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)

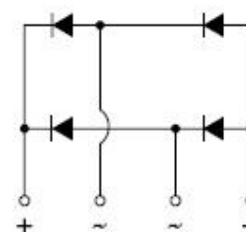
Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: Polarity as marked on the body

Mounting torque: 5 in-lbs maximum

Weight: 4 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	TS10B01G	TS10B02G	TS10B03G	TS10B04G	TS10B05G	TS10B06G	TS10B07G	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	10							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150							A
Rating for fusing (t<8.3ms)	I ² t	93							A ² s
Maximum instantaneous forward voltage (Note 1) @ 5 A @ 10 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							μA
Typical thermal resistance	R _{θJC}	1.4							°C/W
Operating junction temperature range	T _J	- 55 to +150							°C
Storage temperature range	T _{STG}	- 55 to +150							°C

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

ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
TS10B0xG (Note 1)	H	C2	G	TS4B	20 / Tube
		X0		TS4B	Forming
		D2		TS4B	20 / Tube

Note 1: "x" defines voltage from 50V (TS10B01G) to 1000V (TS10B07G)

*: Optional available

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TS10B01GHC2G	TS10B01G	H	C2	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

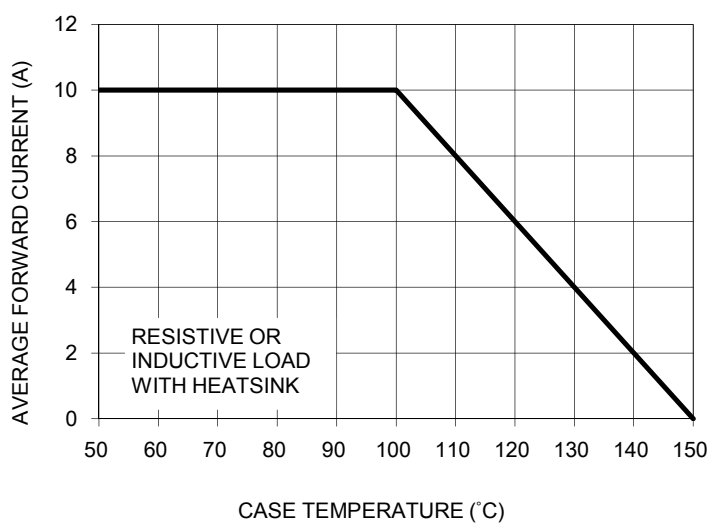


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

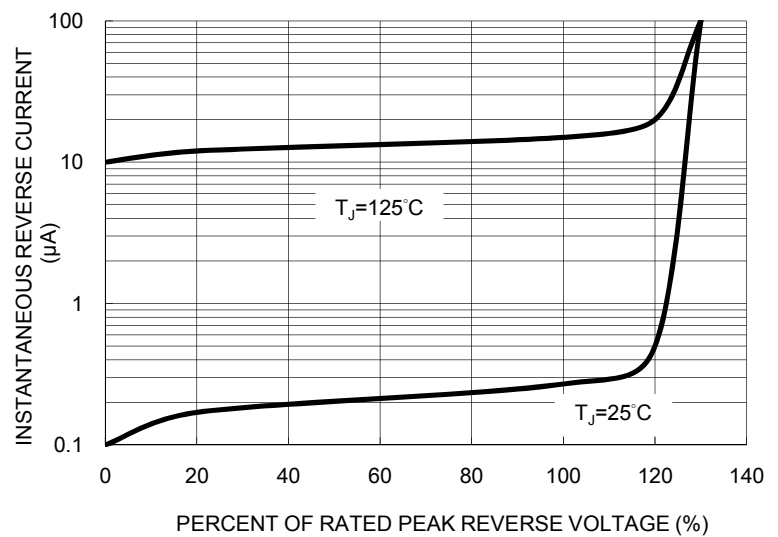


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

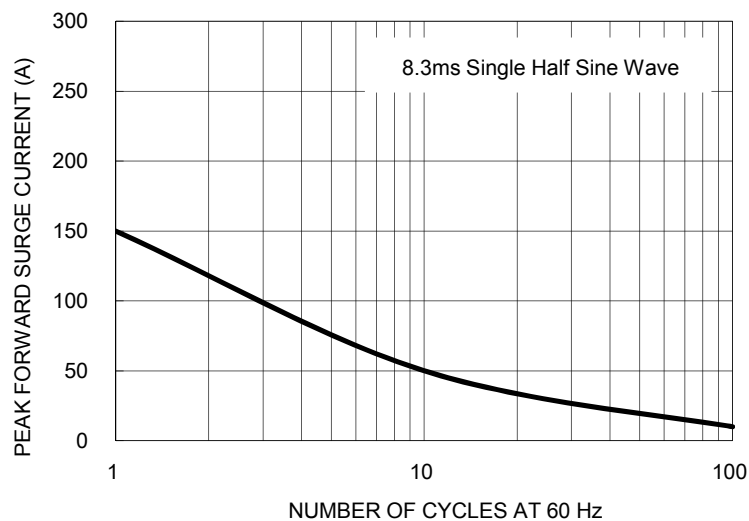


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

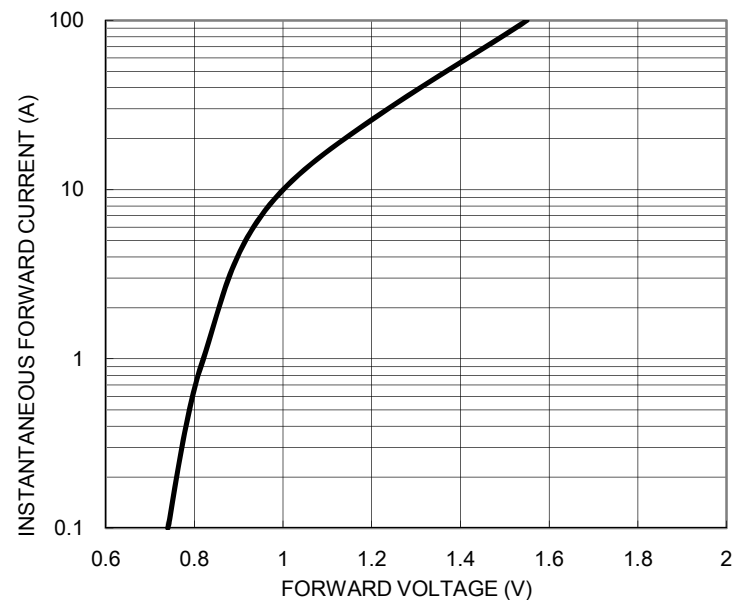
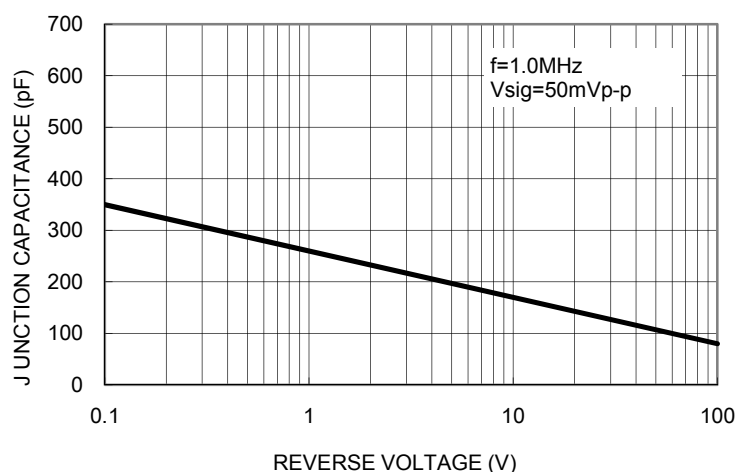
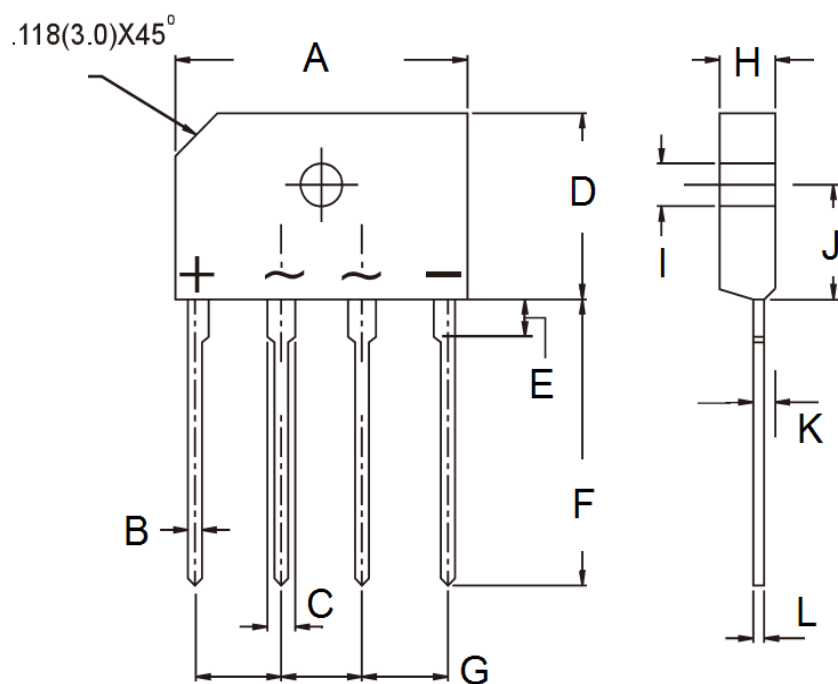


FIG. 5 TYPICAL JUNCTION CAPACITANCE



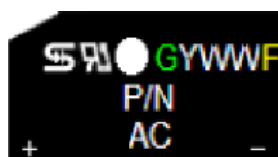
PACKAGE OUTLINE DIMENSIONS

TS4B



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	24.70	25.30	0.972	0.996
B	0.90	1.10	0.035	0.043
C	1.80	2.20	0.071	0.087
D	14.70	15.30	0.579	0.602
E	3.96	4.37	0.156	0.172
F	17.00	18.00	0.669	0.709
G	7.30	7.70	0.287	0.303
H	3.30	3.70	0.130	0.146
I	3.10	3.40	0.122	0.134
J	9.30	9.70	0.366	0.382
K	1.52	1.73	0.060	0.068
L	0.55	0.75	0.022	0.030

MARKING DIAGRAM



P/N = Specific Device Code
G = Green Compound
YWW = Date Code
F = Factory Code

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