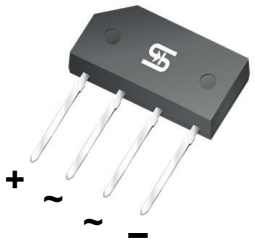
2A, 50V - 800V Glass Passivated Single-Phase Bridge Rectifiers

FEATURES

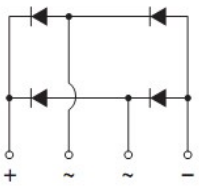
- Ideal for printed circuit board
- High case dielectric strength
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



GBL

MECHANICAL DATA

Case: GBL
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: As marked
Weight: 2 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	D2SB 05	D2SB 10	D2SB 20	D2SB 40	D2SB 60	D2SB 80	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	V
Maximum average forward rectified current	$I_{F(AV)}$	2						A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	80						A
Rating of fusing (t<8.3ms)	I^2t	26						A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 2 A	V_F	1.1						V
Maximum reverse current @ rated V_R T_J=25°C	I_R	10						μA
T_J=125°C		500						
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$	10 47						°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
D2SBxx (Note 1)	H	C2	G	GBL	25 / Tube
		X0		GBL	25 / Tube / Forming
		D2		GBL	25 / Tube

Note 1: "xx" defines voltage from 50V (D2SB05) to 800V (D2SB80)

*: Optional available

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
D2SB80HC2G	D2SB80	H	C2	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

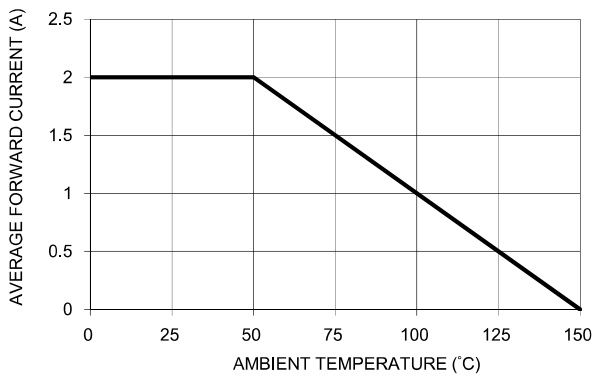


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

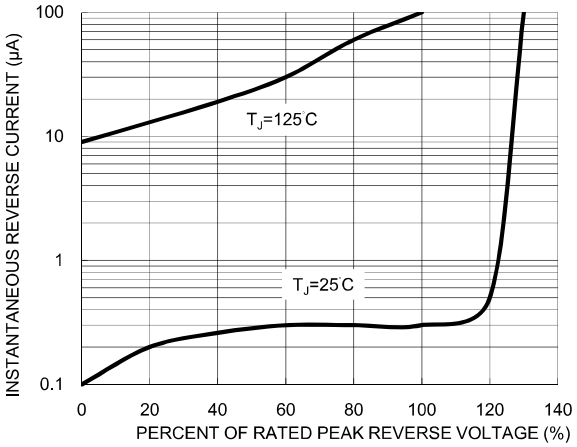


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

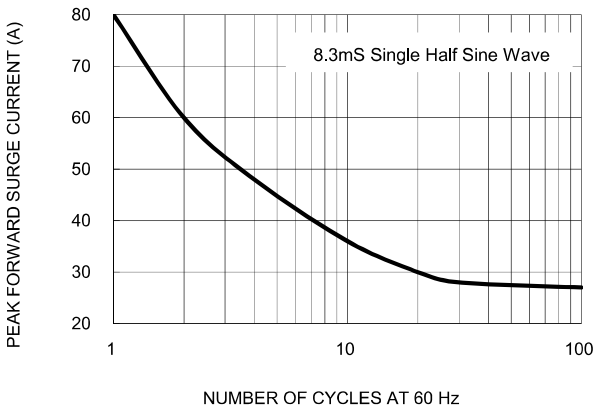


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

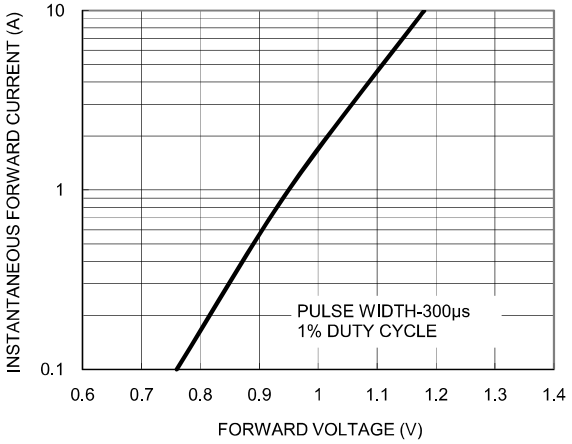
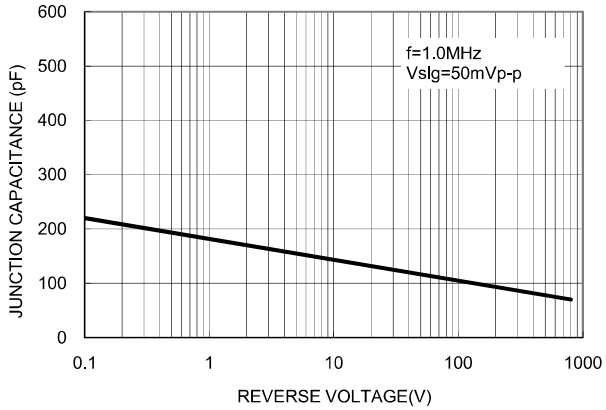
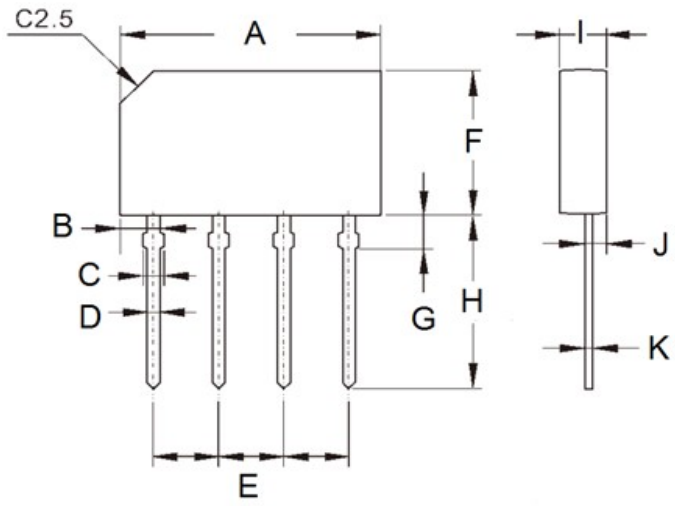


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS

GBL



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	19.70	20.30	0.776	0.799
B	2.30	2.70	0.091	0.106
C	1.30	2.00	0.051	0.079
D	0.90	1.10	0.035	0.043
E	4.80	5.20	0.189	0.205
F	10.70	11.30	0.421	0.445
G	2.30	2.70	0.091	0.106
H	13.00	14.00	0.512	0.551
I	3.30	3.70	0.130	0.146
J	0.80	1.20	0.031	0.047
K	0.40	0.60	0.016	0.024

MARKING DIAGRAM

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

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