

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







MECHANICAL DATA

Case: GBL

Molding compound, UL flammability classification rating 94V-0

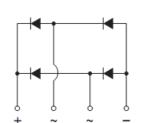
Part no. with suffix "H" means AEC-Q101 qualified

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

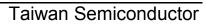
Polarity: As marked **Weight:** 2 g (approximately)



GBL

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)								
	SYMBOL	D2SB	D2SB	D2SB	D2SB	D2SB	D2SB	UNIT
PARAMETER		05	10	20	40	60	80	
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					Α	
Peak forward surge current, 8.3 ms single half sinewave superimposed on rated load	I _{FSM}	80					А	
Rating of fusing (t<8.3ms)	l ² t	26					A^2s	
Maximum instantaneous forward voltage (Note 1) I_F = 2 A	V _F	1.1				٧		
Maximum reverse current @ rated V _R T 105°C	I _R	10						
T _J =125°C		500					μA	
Typical thermal resistance	$R_{\theta JL}$	10					°C/W	
Typical incimal resistance	$R_{\theta JA}$	47						
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)	Н	C2		GBL	25 / Tube	
		X0	G	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	Н	C2	G	AEC-Q101 qualified Green compound	

0

20

40

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

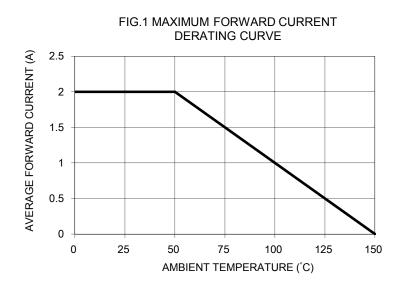


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

100

T_J=125C

10

T_J=25C

60

80

PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

100

120

140

SURGE CURRENT

80

70

8.3mS Single Half Sine Wave

60

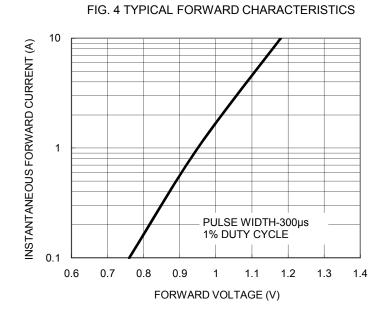
50

40

10

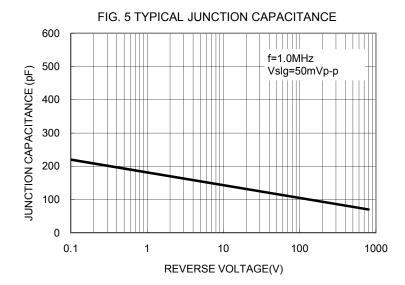
NUMBER OF CYCLES AT 60 Hz

FIG. 3 MAXIMUM NON-REPETITIVE FORWARD



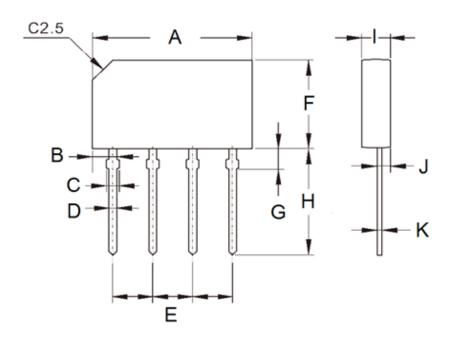
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PACKAGE OUTLINE DIMENSIONS

GBL



DIM.	Unit	(mm)	Unit (inch)			
DIIVI.	Min	Max	Min	Max		
Α	19.70	20.30	0.776	0.799		
В	2.30	2.70	0.091	0.106		
С	1.30	2.00	0.051	0.079		
D	0.90	1.10	0.035	0.043		
Е	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		
Н	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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