2A, 50V - 1400V Glass Passivated Bridge Rectifiers

FEATURES

- Ideal for automated placement
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- UL Recognized File # E-326854
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21

DBLS

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case: Molded plastic body

Molding compound, UL flammability classification rating 94V-0

Moisture sensitivity level: level 1, per J-STD-020

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

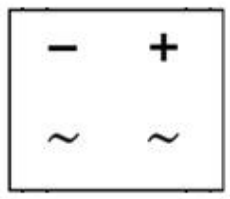
Packing code with suffix "G" means green compound (halogen-free)

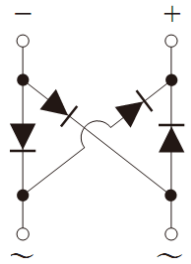
Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: Polarity as marked on the body

Weight: 0.36 g (approximately)





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

PARAMETER	SYMBOL	DBLS 201G	DBLS 202G	DBLS 203G	DBLS 204G	DBLS 205G	DBLS 206G	DBLS 207G	DBLS 208G	DBLS 209G	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	1200	1400	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	840	980	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	1200	1400	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}	50									A
Rating for fusing (t<8.3ms)	I^2t	10.3									A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 2 A	V_F	1.15							1.30		V
Maximum reverse current @ rated V_R T_J=25°C	I_R	2									μA
T_J=125°C		500									
Typical thermal resistance	$R_{\theta JL}$	15									°C/W
	$R_{\theta JA}$	40									
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
DBLS20xG (Note 1)	H	C1	G	DBLS	50 / TUBE
		RD			1,500 / 13" Paper reel

Note 1: "x" defines voltage from 50V (DBLS201G) to 1400V (DBLS209G)

*: Optional available

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
DBLS207GHRDG	DBLS207G	H	RD	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

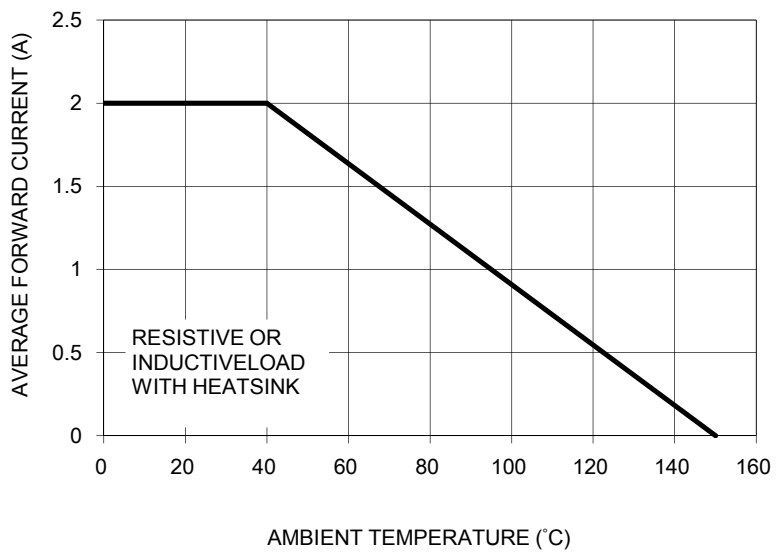


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

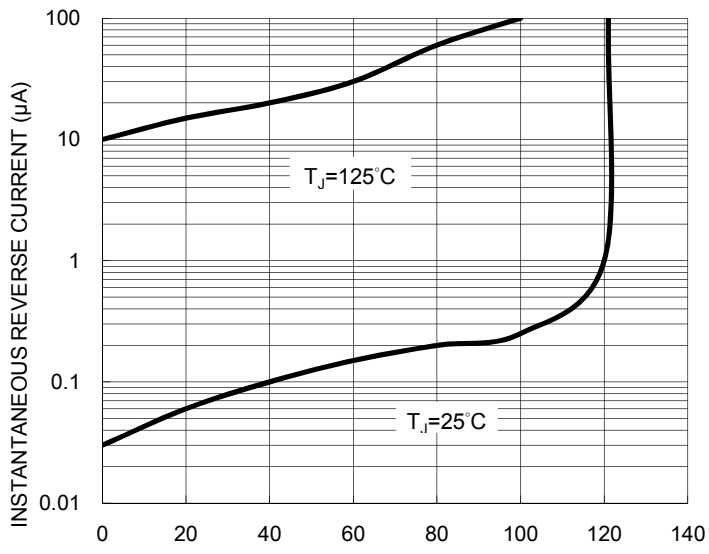


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

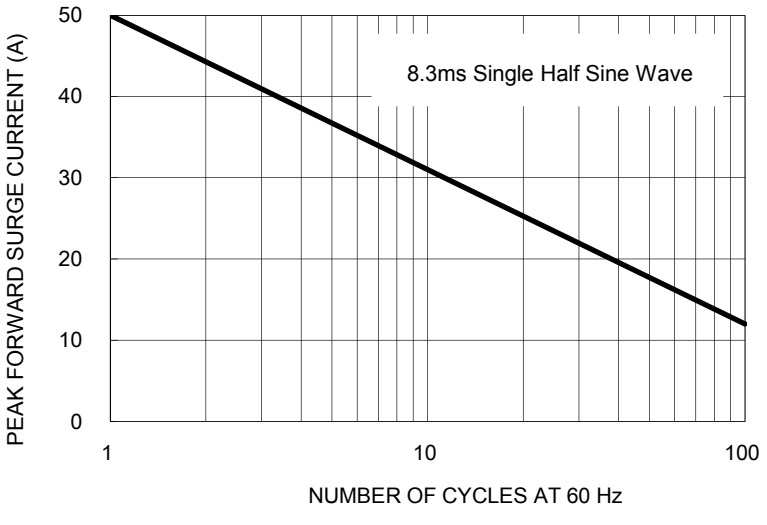


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

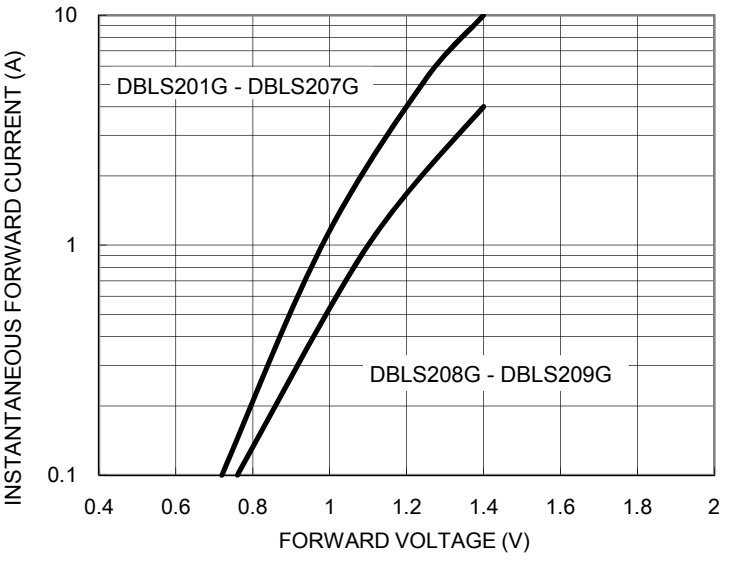
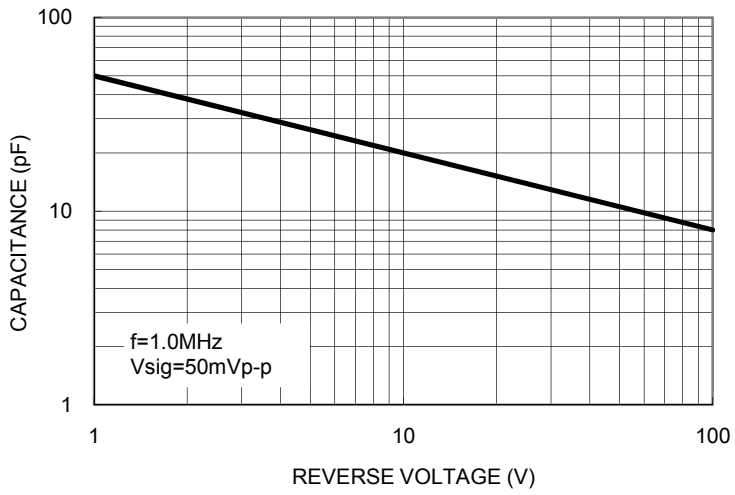
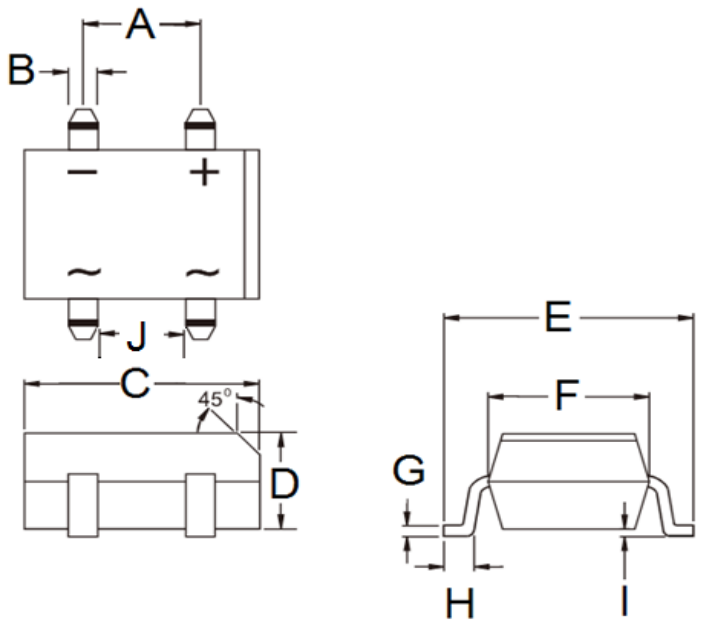


FIG. 5 TYPICAL JUNCTION CAPACITANCE



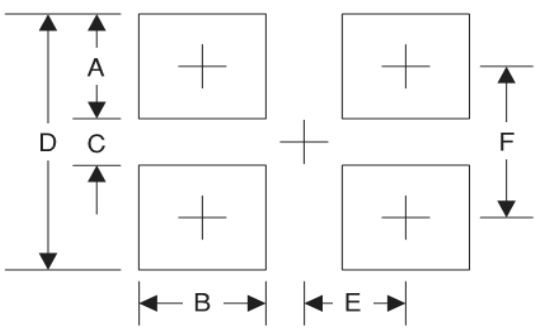
PACKAGE OUTLINE DIMENSIONS

DBLS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	5.00	5.20	0.197	0.205
B	1.02	1.20	0.040	0.047
C	8.13	8.51	0.320	0.335
D	2.40	2.60	0.094	0.102
E	9.80	10.30	0.386	0.406
F	6.20	6.50	0.244	0.256
G	0.22	0.33	0.009	0.013
H	1.02	1.53	0.040	0.060
I	0.076	0.33	0.003	0.013
J	3.90	4.10	0.154	0.161

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	2.3	0.091
B	1.3	0.051
C	6.9	0.272
D	11.5	0.453
E	2.6	0.102
F	9.2	0.362

MARKING DIAGRAM

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

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DBLS201G DBLS202G DBLS203G DBLS204G DBLS205G DBLS206G DBLS207G DBLS208G DBLS209G DBLS201GHRD DBLS204G RDG DBLS207G RDG DBLS206GHRDG DBLS207GHRDG DBLS204GHRDG DBLS209G RDG DBLS202GHRDG DBLS209GHRDG DBLS208GHRDG DBLS208G RDG DBLS203G RDG DBLS203GHRDG DBLS209GHRD DBLS205G RDG DBLS205GHRDG DBLS206G RDG DBLS202G RDG DBLS201G RDG DBLS201GHRDG DBLS209G RD DBLS208G RD DBLS205G RD DBLS201G RD DBLS204G RD DBLS207G RD DBLS206G C1G DBLS204G C1G DBLS205G C1G DBLS207G C1G DBLS208G C1G DBLS209G C1G DBLS204GH DBLS205GH DBLS206GH DBLS207GH DBLS208GH DBLS209GH