

Features

- ✧ UL Recognized File # E-326854
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High temperature soldering guaranteed:
260°C/ 10 seconds at 5lbs., (2.3kg) tension
- ✧ High surge current capability
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ✧ Weight: 0.37 grams

Ordering Information (example)

Part No.	Package	Packing	Packing code	Green Compound Packing code
DBL101G	DBL	50 / TUBE	C1	C1G

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	DBL 101G	DBL 102G	DBL 103G	DBL 104G	DBL 105G	DBL 106G	DBL 107G	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	$I_{F(AV)}$	1							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	40					30		A
Maximum Instantaneous Forward Voltage (Note 1) @1 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Block Voltage @ $T_A=25^{\circ}C$ @ $T_A=125^{\circ}C$	I_R					10	500		μA
Typical Junction Capabitanace	C_j	25							pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$					40	15		$^{\circ}C/W$
Operating Temperature Range	T_J	- 55 to + 150							$^{\circ}C$
Storage Temperature Range	T_{STG}	- 55 to + 150							$^{\circ}C$

Notes 1: Pulse Test with PW=300 usec, 1% Duty Cycle

RATINGS AND CHARACTERISTIC CURVES (DBL101G THRU DBL107G)

FIG.1 FORWARD CURRENT DERATING CURVE

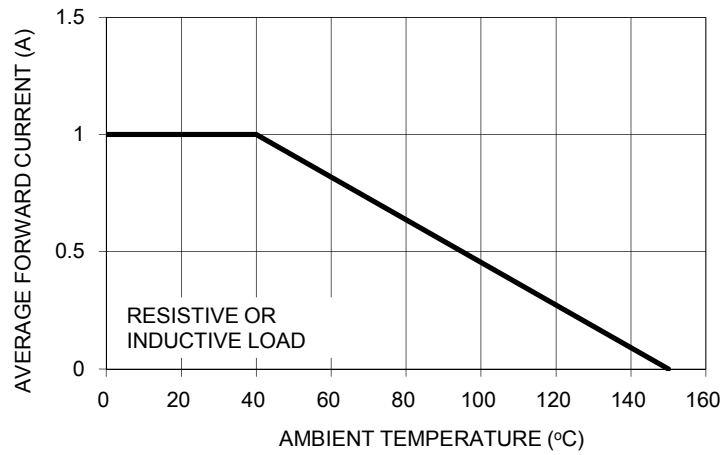


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

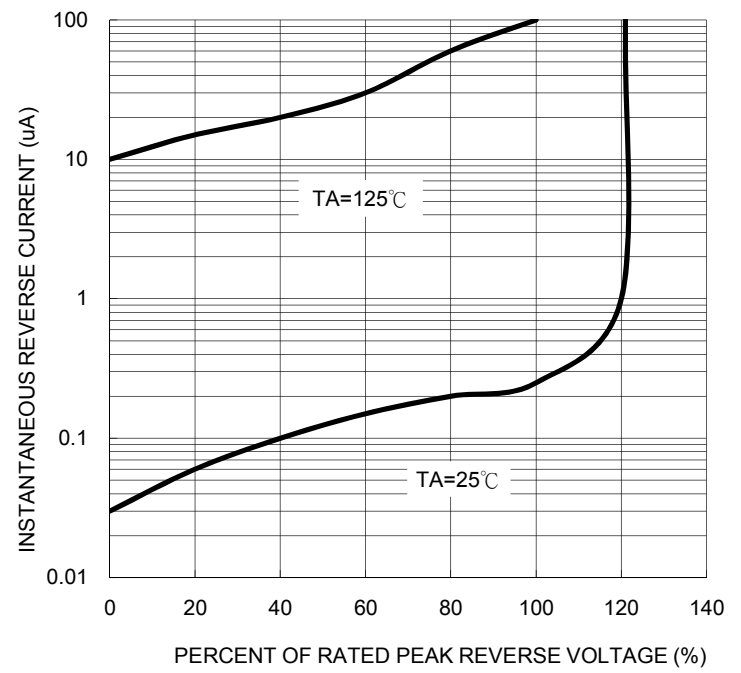


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

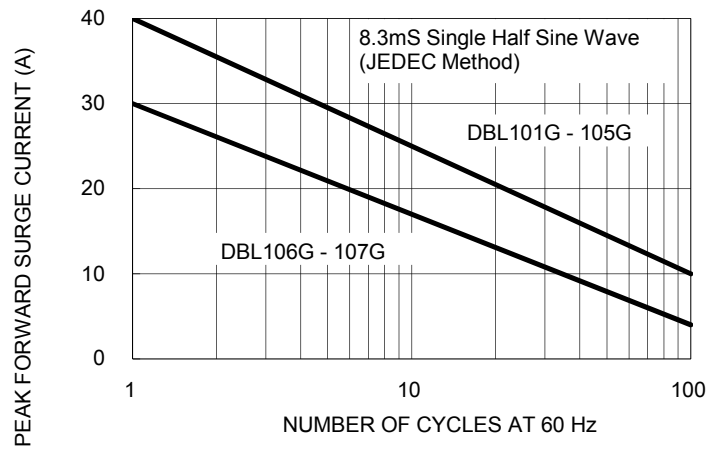


FIG. 4 TYPICAL JUNCTION CAPACITANCE

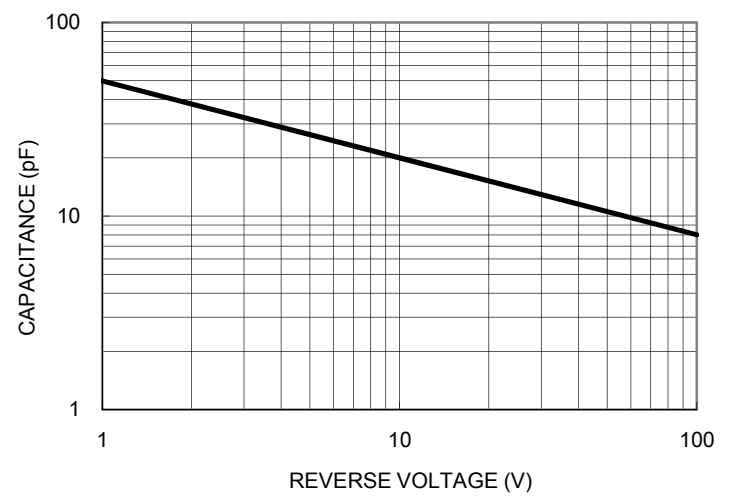
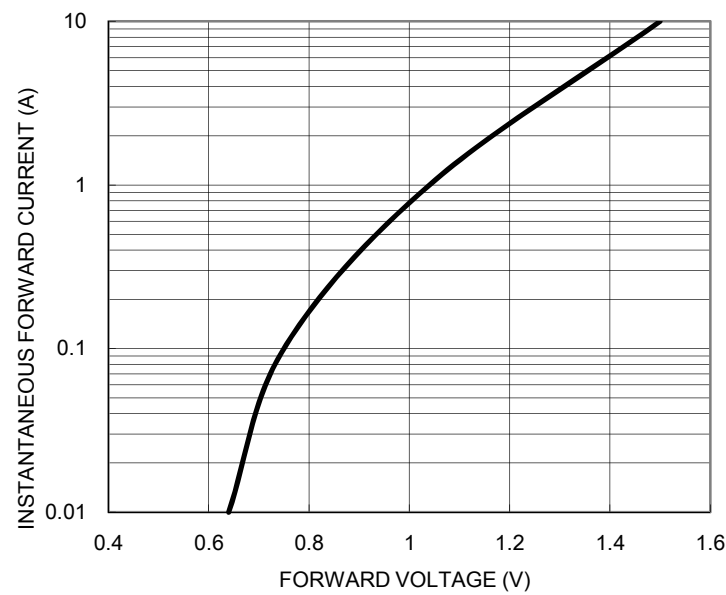


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

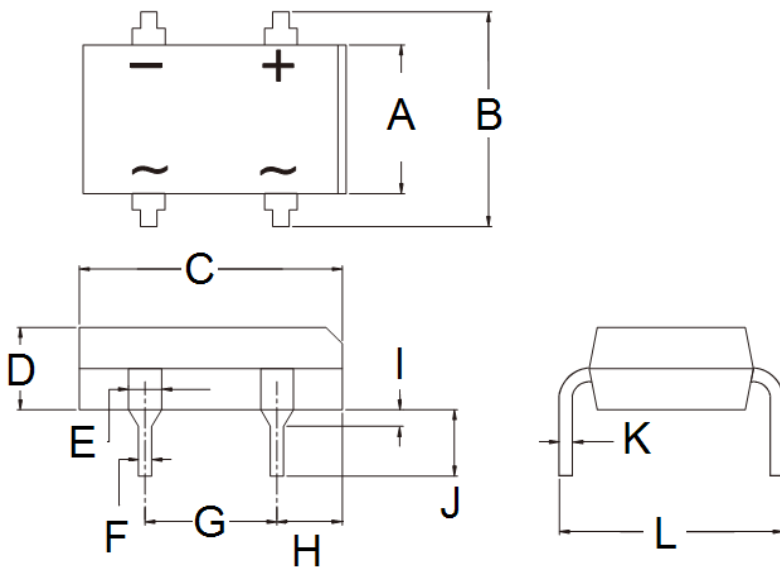


Ordering information

Part No.	Package	BULK Packing	Packing code	Green Compound Packing code
DBL10xG	DBL	50 / TUBE	C1	C1G

Note: "x" is Device Code from "1" thru "7".

Dimensions



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	6.20	6.50	0.244	0.256
B	7.24	8.00	0.285	0.315
C	8.12	8.51	0.320	0.335
D	3.05	3.30	0.120	0.130
E	0.89	1.14	0.035	0.045
F	0.46	0.58	0.018	0.023
G	5.00	5.20	0.197	0.205
H	1.39	1.90	0.055	0.075
I	1.27	2.03	0.050	0.080
J	3.81	4.69	0.150	0.185
K	0.22	0.33	0.009	0.013
L	7.600	8.90	0.299	0.350

Marking Diagram



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