DBL101S thru DBL107S

SURFACE MOUNT BRIDGE RECTIFIERS

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- High surge current capability
- UL Recognized File # E476623

Mechanical Data

Case: DFS Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

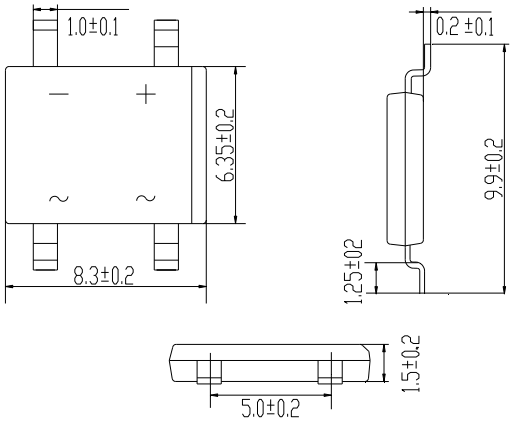
High temperature soldering guaranteed:

260℃/10 seconds, 0.375 (9.5mm) lead length,

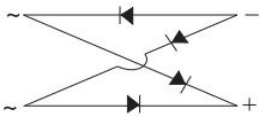
5lbs.(2.3kg) tension

Mounting Position: Any

DB-L



Dimensions in millimeters



Case Style DFS

Maximum Ratings & Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter	Symbol	DBL101S	DBL102S	DBL103S	DBL104S	DBL105S	DBL106S	DBL107S	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
Average forward rectified output current	$I_{F(AV)}$	1.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35							A
Rating for fusig (t<8.3ms)	I^2t	5.0							A^2sec
Maximum instantaneous forward voltage drop per leg at 1.0A	VF	1.10							V
Maximum DC reverse current at Tj=25℃	IR	5.0							uA
rated DC blocking voltage per leg Tj=125℃		500							
Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$	40							℃/W
	$R_{\theta JL}$	15							
Operating junction temperature range	TJ	-55 to +150							℃
Storage temperature range	T_{STG}	-55 to +150							℃

Note

(1) Units mounted on PCB with 0.51×0.51(13×13mm) Copper Pads

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

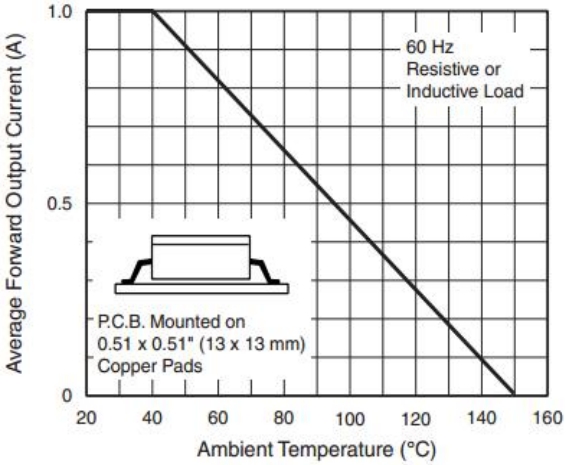


Fig. 1 - Derating Curve Output Rectified Current

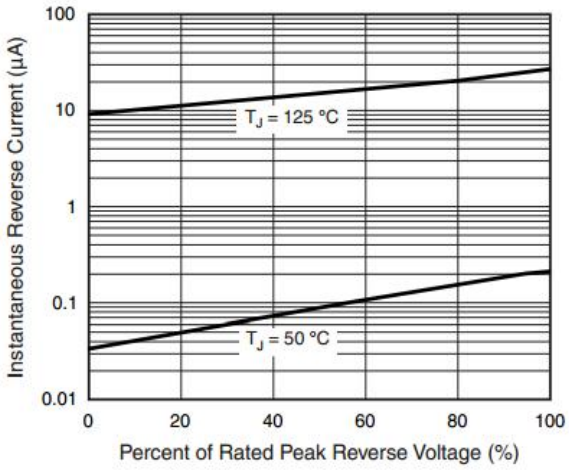


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode

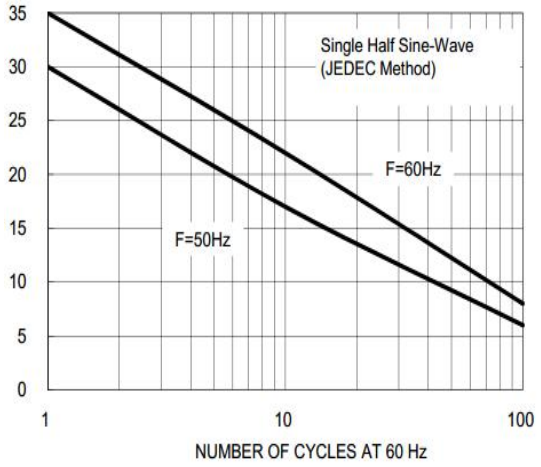


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

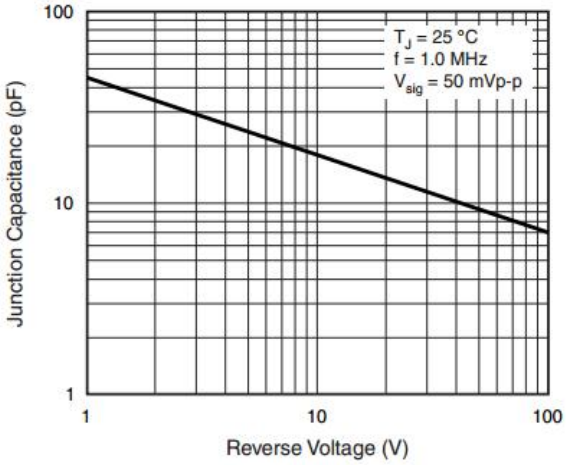


Fig. 5 - Typical Junction Capacitance Per Diode

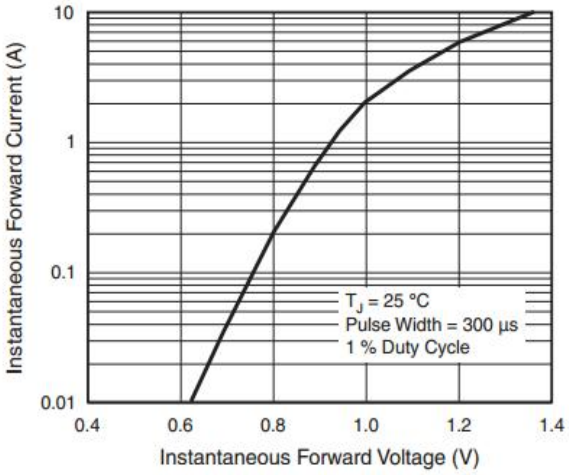


Fig. 3 - Typical Forward Characteristics Per Diode

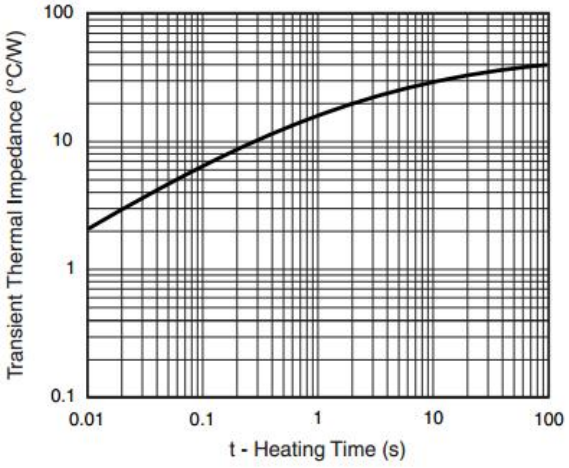


Fig. 6 - Typical Transient Thermal Impedance