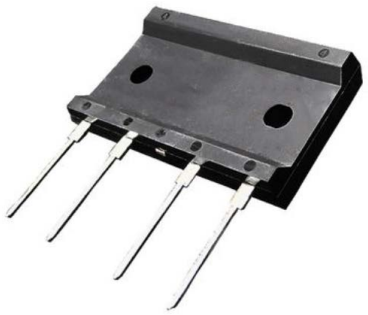
DXB2508L

17-Jun-2022

Low VF Bridge Rectifiers

DXB2508L



Features

- Glass Passivated Chip Junction
- Low IRRM
- Low VF
- High VRRM
- Special frame design for heat dissipation

Benefits

- Case: DXB
- Terminals: Solderable Per MIL-STD-750
- Reduced power loss and switching transistor

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	DXB2508L	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800	V
Maximum RMS voltage	V_{RMS}	560	V
Maximum DC Blocking Voltage	V_{DC}	800	V
Average Rectified Output Current	I_o	25	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	300	A
I^2t rating for fusing (1ms< t < 10ms)	I^2t	373.5	A^2S
Type Forward Voltage at 12.5A	V_F	0.85	V
Maximum Forward Voltage at 12.5 A		0.95	
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I_R	10 500	μA
Junction to ambient，without heatsink	$R_{\theta JA}$	22	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.
2. Mounted on glass epoxy PC board with 4×1.5"×1.5"（3.81×3.81 cm）copper pad.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 ˚C unless otherwise noted)

Fig.1 Current Derating, Case

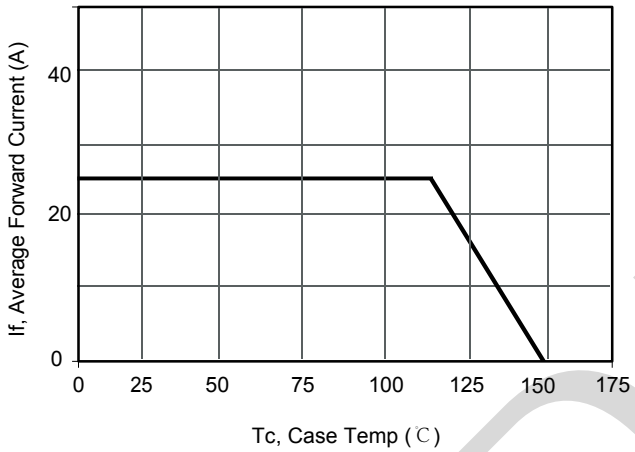


Fig.2 Maximum Non-Repetitive Peak Forward Surage Current

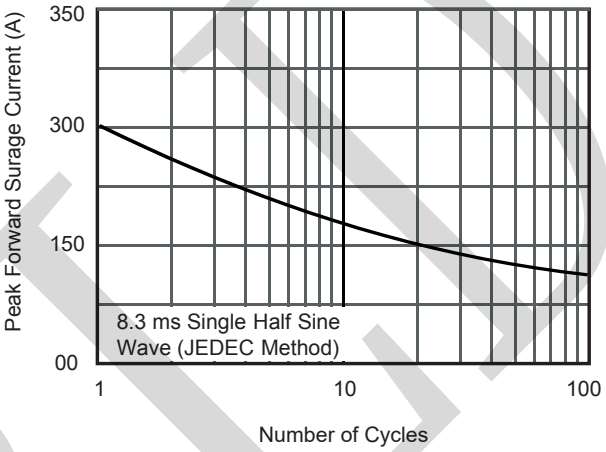


Fig.3 Typical Forward Voltage

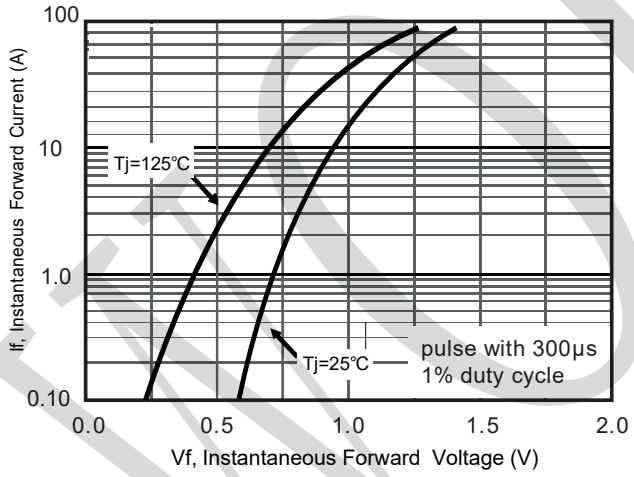
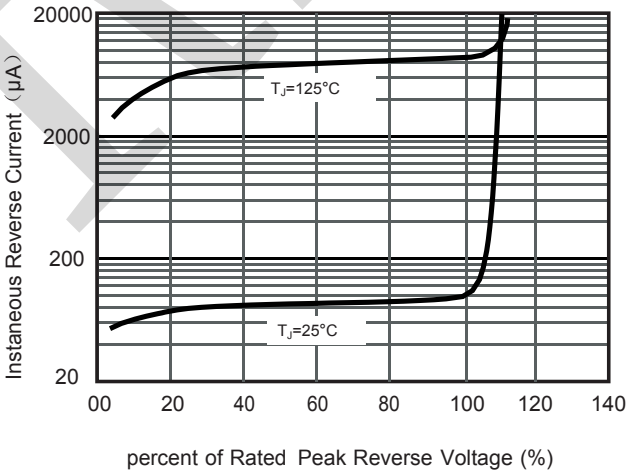
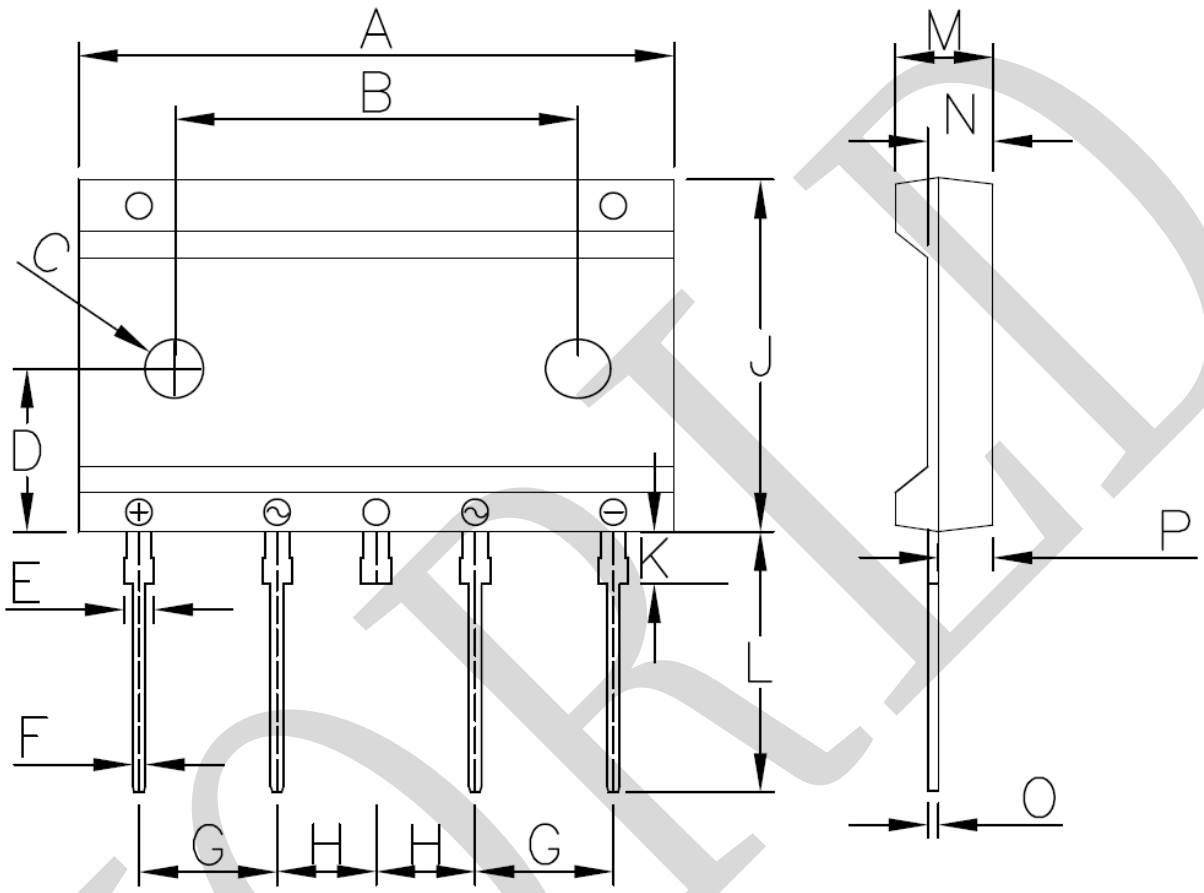


Fig.4 Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS



DXB mechanical data: unit mm(inch)

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
max	46.1	31.1	4.8	12.8	2.5	1.3	10.9	8.0	27.5	4.2	20.5	8.4	5.9	1.0	4.8
min	45.3	30.9	4.4	12.2	2.1	0.7	10.3	7.2	26.5	3.8	19.5	7.6	5.1	0.6	4.2
max	1.81	1.22	0.19	0.51	1.3	0.10	0.43	0.32	1.09	0.17	0.81	0.33	0.24	0.04	0.19
min	1.78	1.21	0.17	0.48	1.0	0.02	0.40	0.28	1.04	0.15	0.76	0.29	0.20	0.5	0.16