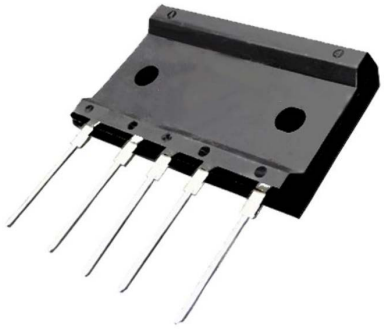
DXT4008L

17-Jun-2022

Low VF Three-phase Bridge Rectifiers

DXT4006L



Features

- Glass Passivated Chip Junction
- Low I_{RRM}
- Low V_F
- High V_{RRM}
- Special frame design for heat dissipation

Benefits

- Case: DXT
- Terminals: Solderable Per MIL-STD-750
- Reduced power loss and switching transistor and reduced EMI

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	DXT4008L	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	40	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	450	A
I^2t rating for fusing (1ms< t < 8.3ms)	I^2t	840	A^2S
Type Forward Voltage at 20 A	V_F	0.92	V
Maximum Forward Voltage at 20 A		1.0	
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I_R	5 100	μA
Junction to ambient，without heatsink[1]	$R_{\theta JA}$	16	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Note: 1. 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

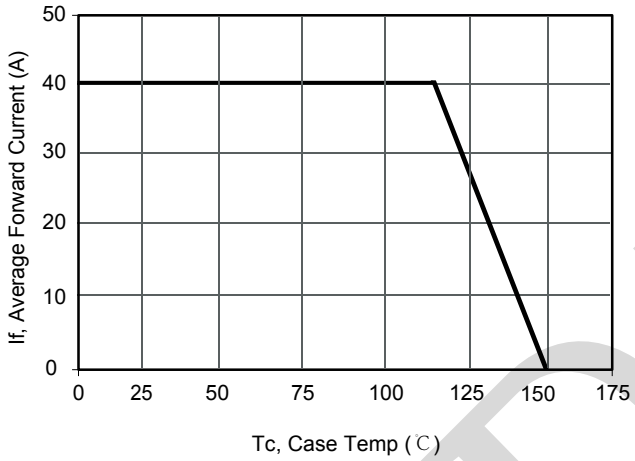


Fig.2 Maximum Non-Repetitive Peak Forward Surage Current

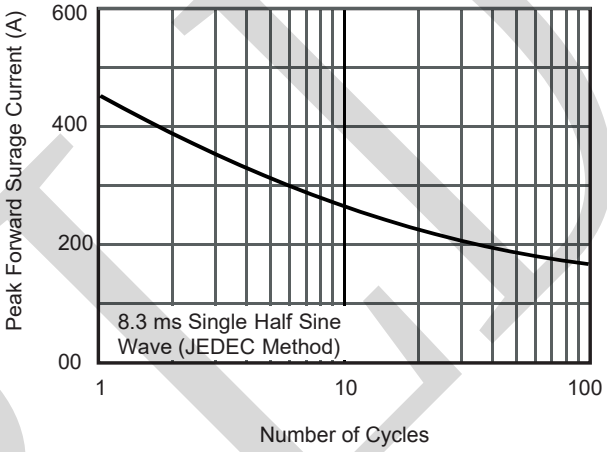


Fig.3 Typical Forward Voltage

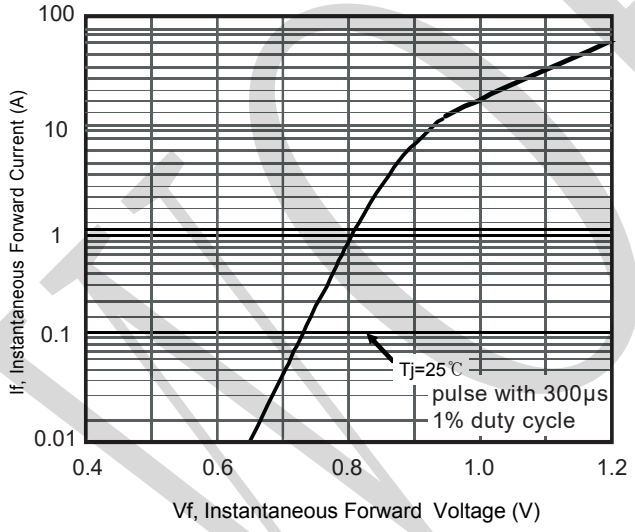
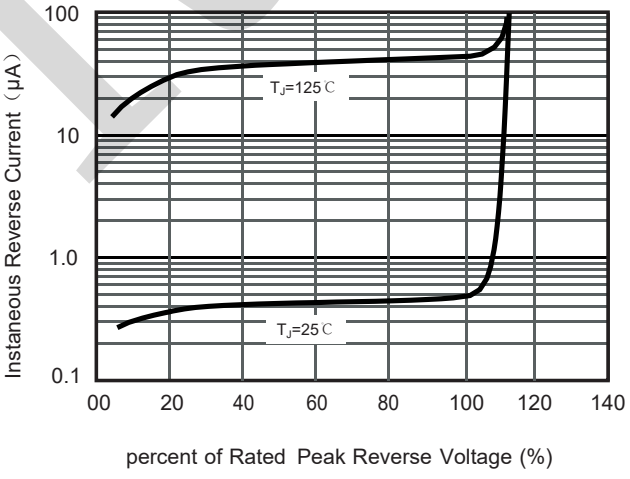
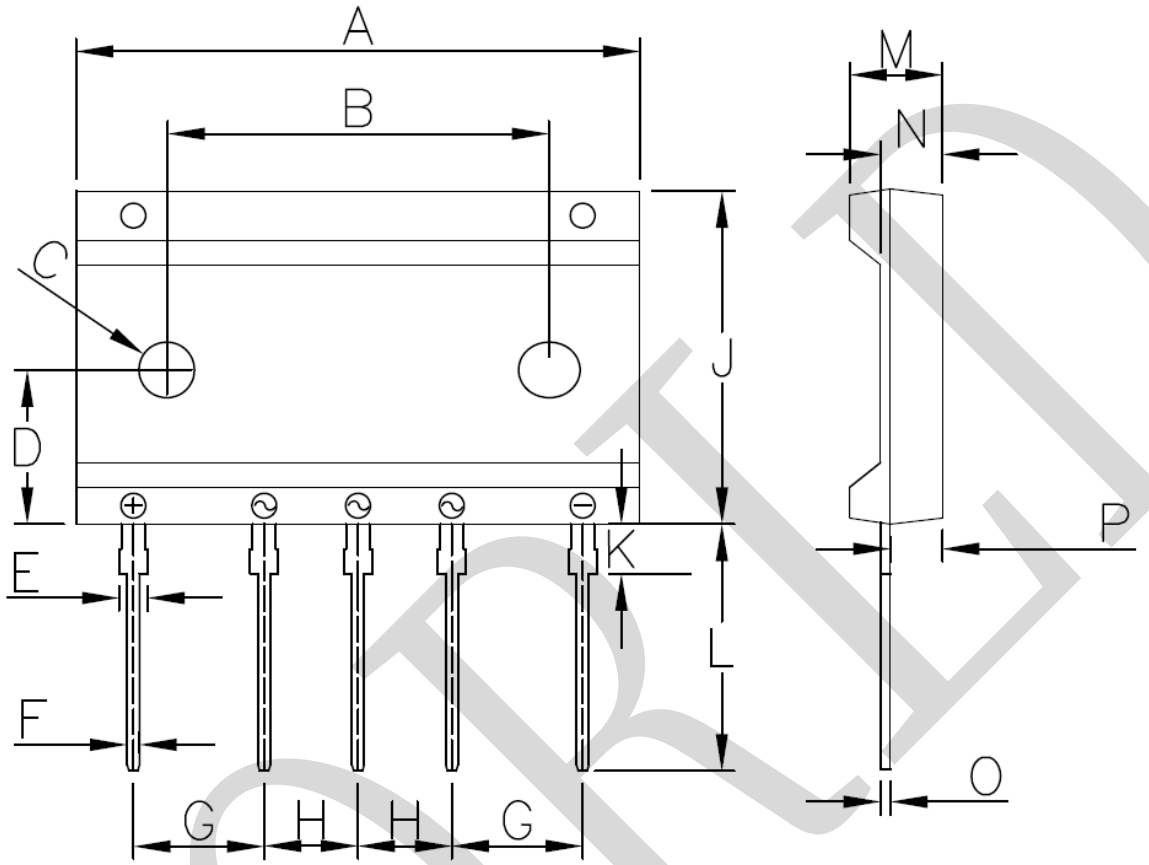


Fig.4 Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS



DXT 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