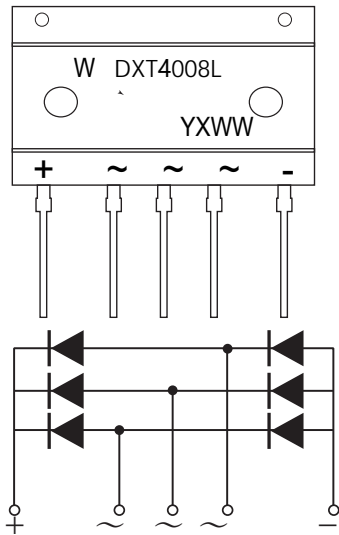


## Low VF Three-phase Bridge Rectifiers



### Features

- Glass Passivated Chip Junction
- LOW  $I_{RRM}$
- LOW VF
- 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
$I^2 t$ rating for fusing ( 1ms < t < 8.3ms)	$I^2 t$	840	A <sup>2</sup> S
Type Forward Voltage at 20 A	VF	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	$\mu$ A
Typical Junction Capacitance (Note1)	$C_j$	50	pF
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)

Figure 1. Derating Curve Output Rectified Current

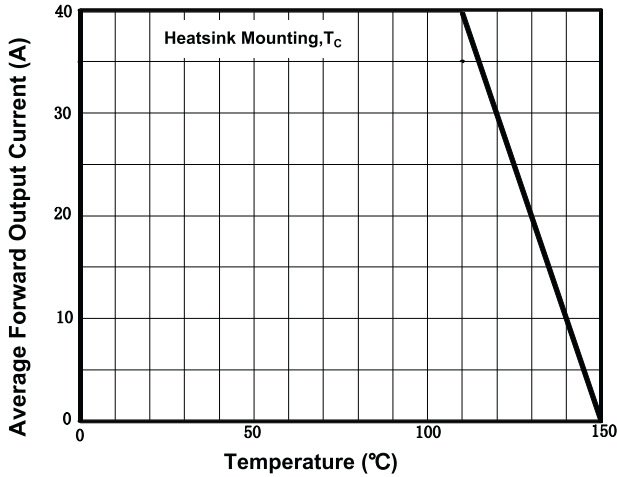


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

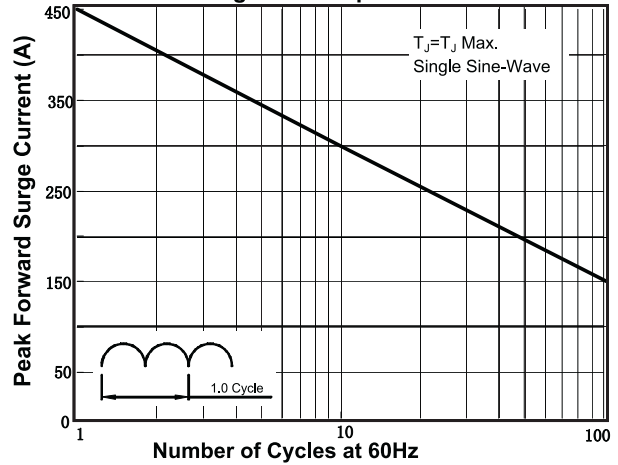


Figure 3. Typical Forward Characteristics Per Diode

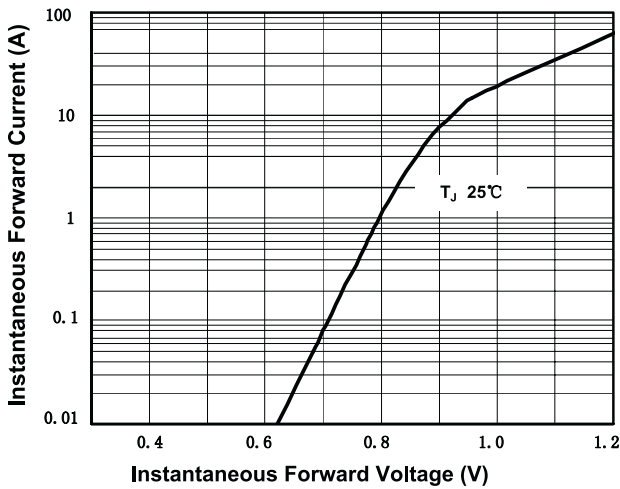


Figure 4. Typical Junction Capacitance Per Diode

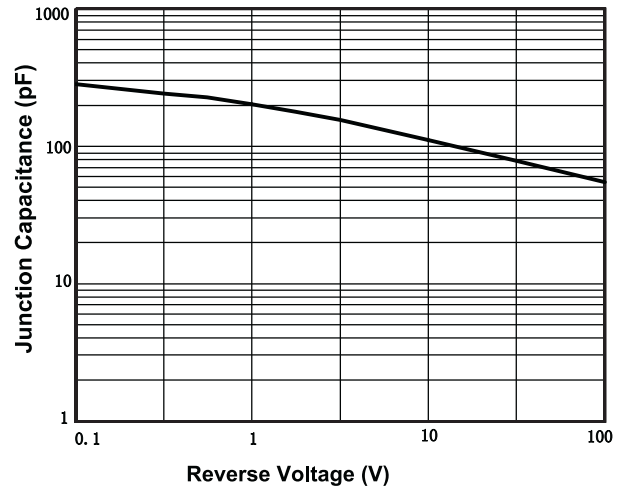
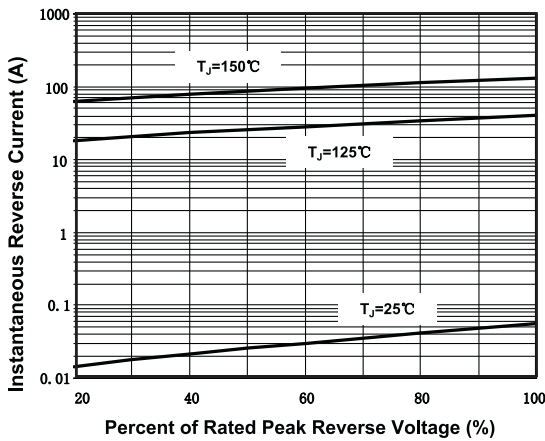


Figure 5. Typical Reverse Characteristics Per Diode



## PACKAGE OUTLINE DIMENSIONS

