

Super LLD2 Series

(For PFC circuit)

LOW LOSS SUPER HIGH SPEED RECTIFIER

Features

- Insulated package by fully molding
- Super high speed switching
- High reliability by planer design

Applications

- PFC circuit (current discontinuous mode)

Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		600	V
Isolation voltage	V_{iso}		1500	V
Average output current	I_o	duty=1/2, $T_c=89^{\circ}C$ Square wave	10	A
Non-Repetitive surge current	I_{FSM}	Sine wave 10ms	100	A
Operating junction temperature	T_j		150	$^{\circ}C$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}C$

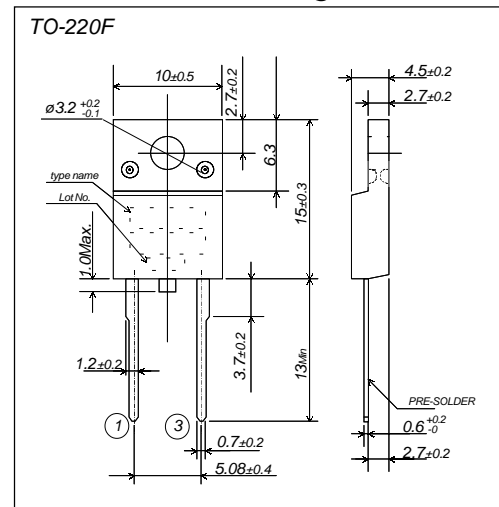
- Electrical characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Conditions	Characteristics	Unit
Forward voltage	V_F	$I_F=10A$	Max. 1.55	V
Reverse current	I_R	$V_R=V_{RRM}$	Max. 10.0	μA
Reverse recovery time	t_{rr}	$I_F=0.1A, I_R=0.2A, I_{rec}=0.05A$	Max. 50.0	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	Max. 3.5	$^{\circ}C/W$

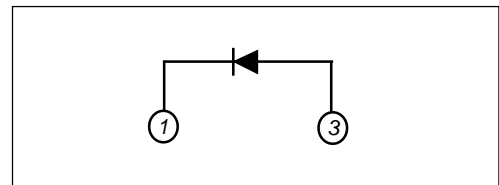
- Mechanical characteristics

Mounting torque	Recommended torque	0.3 to 0.5	N·m
Approximate mass		2.0	g

Outline drawings, mm

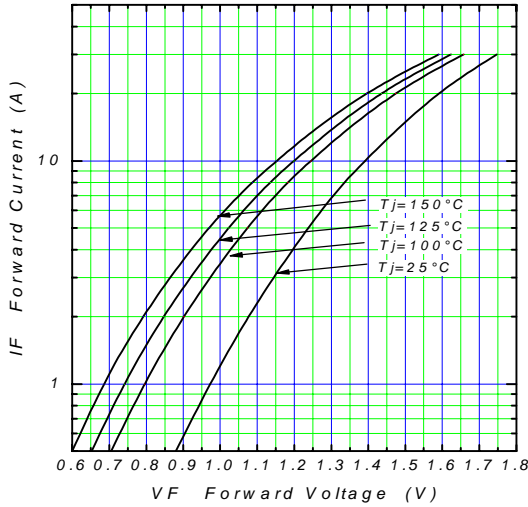


Connection diagram

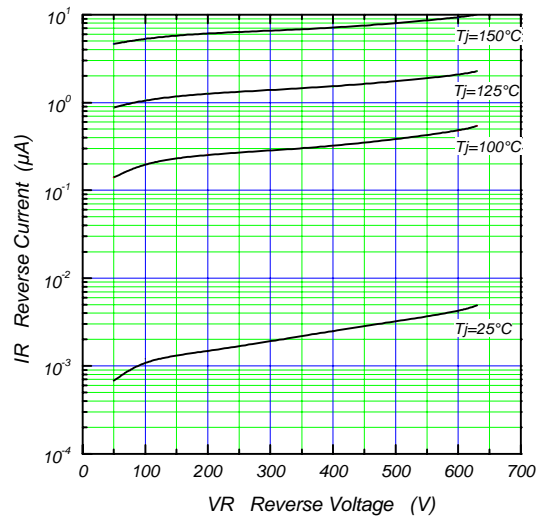


Characteristics

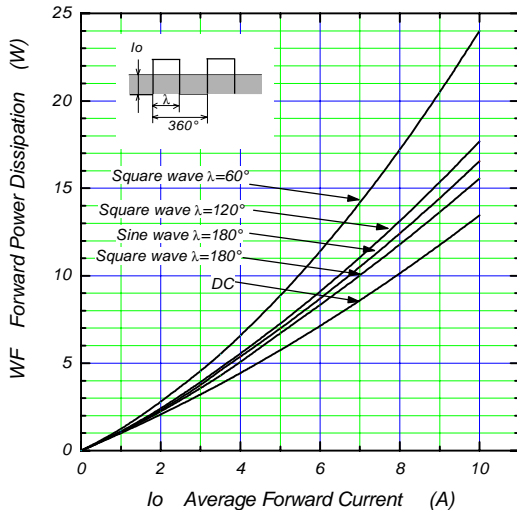
Forward characteristic (typ.)



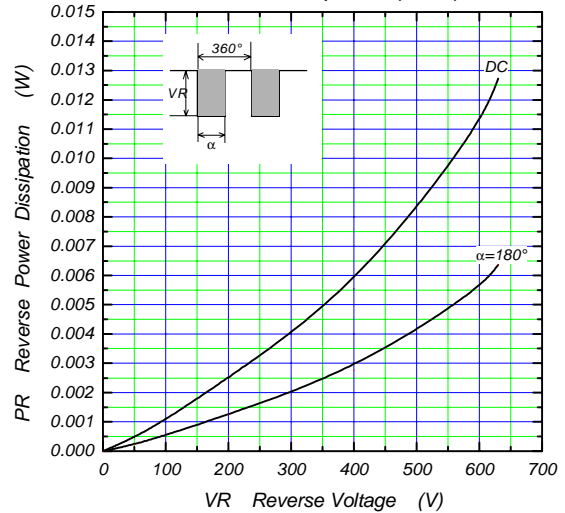
Reverse Characteristic (typ.)



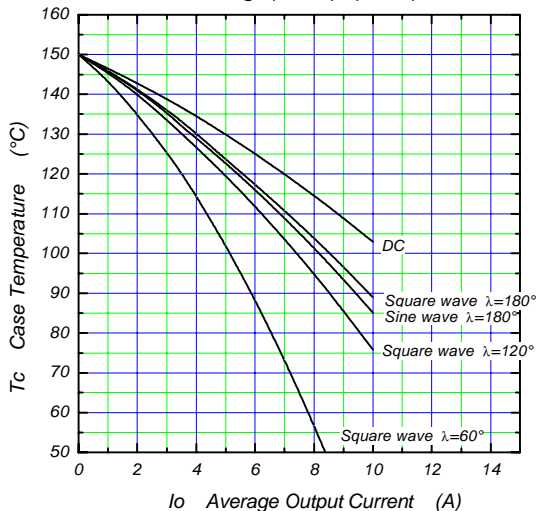
Forward Power Dissipation (max.)



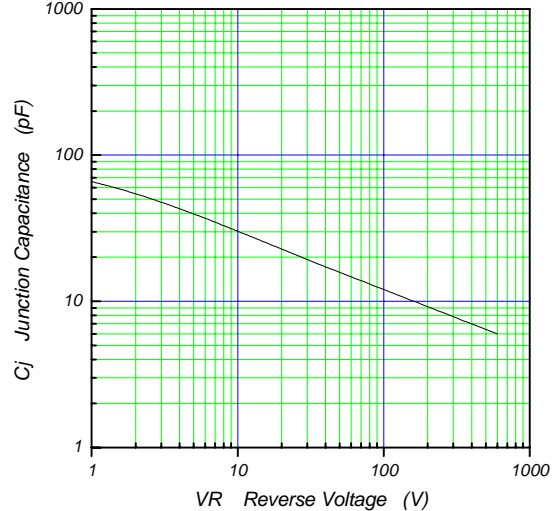
Reverse Power Dissipation (max.)



Current Derating (I_o - T_c) (max.)



Junction Capacitance Characteristic (typ.)



λ : Conduction angle of forward current for each rectifier element
 I_o : Output current of center-tap full wave connection

