

Super LLD2 Series

(For PFC circuit)

LOW LOSS SUPER HIGH SPEED RECTIFIER

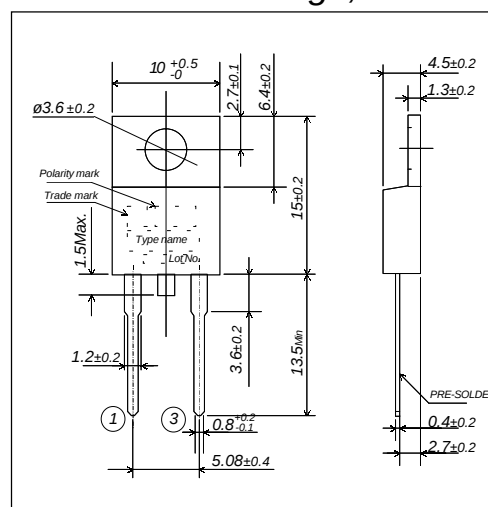
Features

- Super high speed switching
- High reliability by planer design

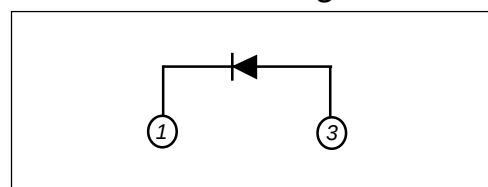
Applications

- PFC circuit (current discontinuous mode)

Outline drawings, mm



Connection diagram



Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		600	V
Average output current	I_O	duty=1/2, $T_c=115^{\circ}\text{C}$ Square wave	10	A
Non-Repetitive surge current	I_{FSM}	Sine wave 10ms	100	A
Operating junction temperature	T_j		150	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}\text{C}$

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

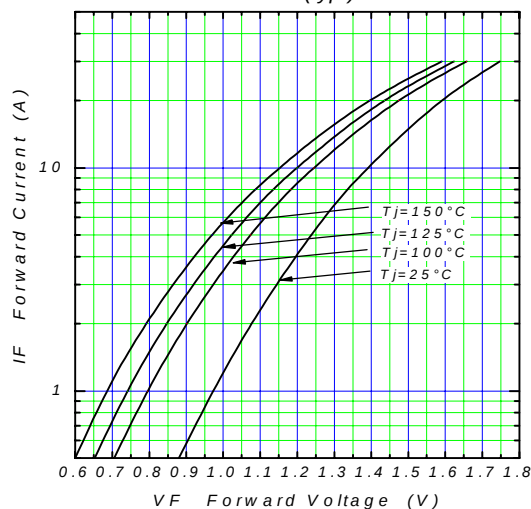
Item	Symbol	Conditions	Characteristics	Unit
Forward voltage	V_F	$I_F=10\text{A}$	Max. 1.55	V
Reverse current	I_R	$V_R=V_{RRM}$	Max. 10.0	μA
Reverse recovery time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.2\text{A}$, $t_{rec}=0.05\text{A}$	Max. 50.0	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	Max. 2.0	$^{\circ}\text{C/W}$

- Mechanical characteristics

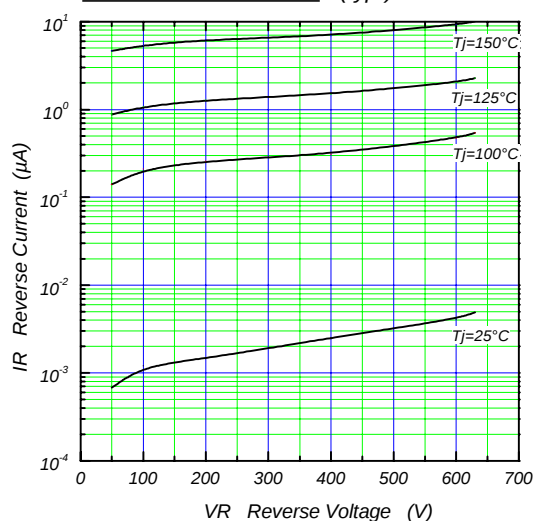
Mouunting torque	Recommended torque	0.3 to 0.5	N·m
Approximate mass		2.0	g

Characteristics

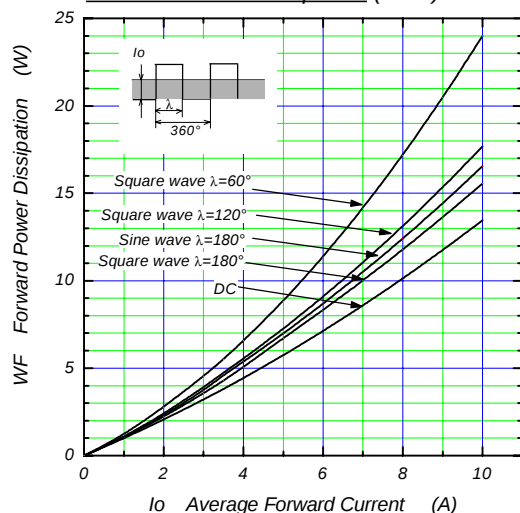
Forward characteristic (typ.)



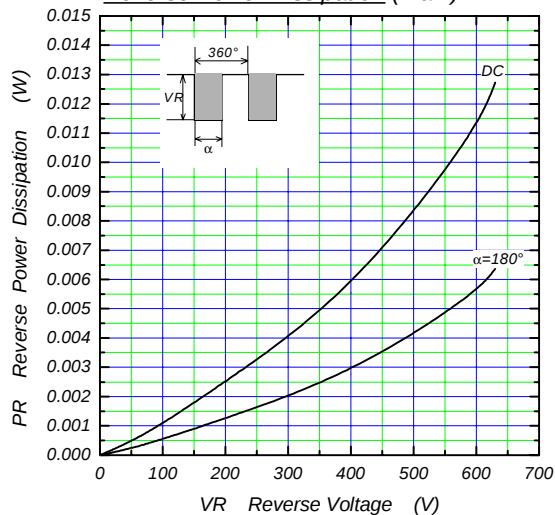
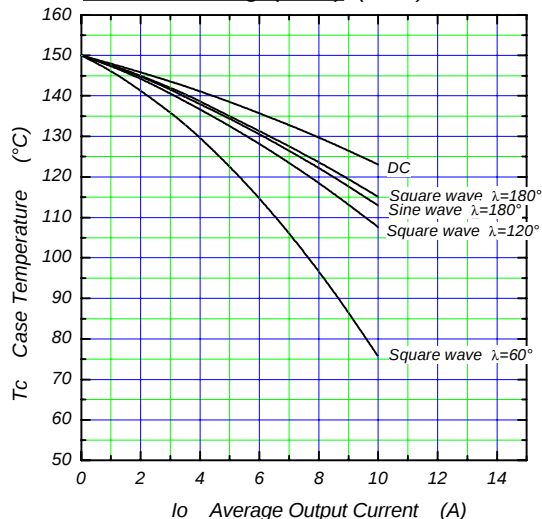
Reverse Characteristic (typ.)



Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)

Current Derating (I_o - T_c) (max.)

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

Junction Capacitance Characteristic (typ.)

