

Super LLD II (For PFC circuit) (current discontinuous mode)

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 continuous mode)

Maximum ratings and characteristics

- Maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		600	V
Isolating voltage	V_{iso}	Terminals-to-Case, AC, 1min.	1500	V
Average output current	I_o	Square wave duty=1/2, $T_c=89^\circ\text{C}$	20 *	A
Non-Repetitive surge current	I_{FSM}	Sine wave 10ms, 1shot	100	A
Operating junction temperature	T_j		150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

* Out put current of centertap full wave connection.

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

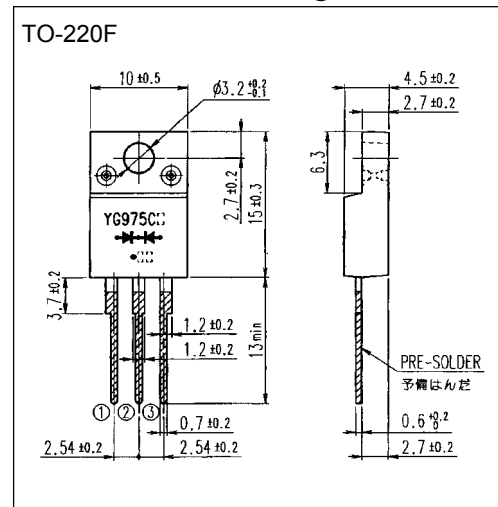
Item	Symbol	Conditions	Characteristics	Unit
Forward voltage	V_F	$I_F=10\text{A}$	Max 1.55	V
Reverse current	I_R	$V_R=V_{RRM}$	Max. 10.0	μA
Reverse recovery time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.2\text{A}$, $I_{rec}=0.05\text{A}$	Max. 50.0	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	Max. 1.75	$^\circ\text{C/W}$

** Rating per element

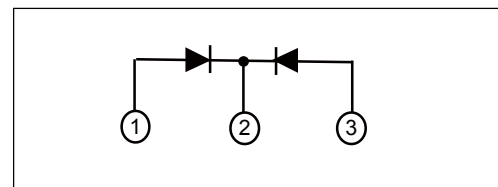
- Mechanical characteristics

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

Outline drawings, mm

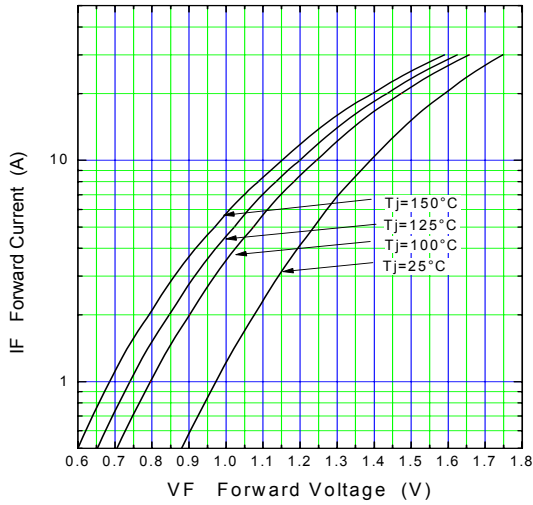


Connection diagram

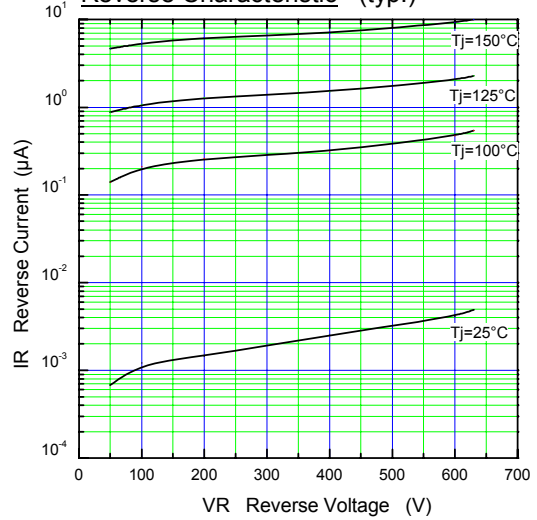


Characteristics

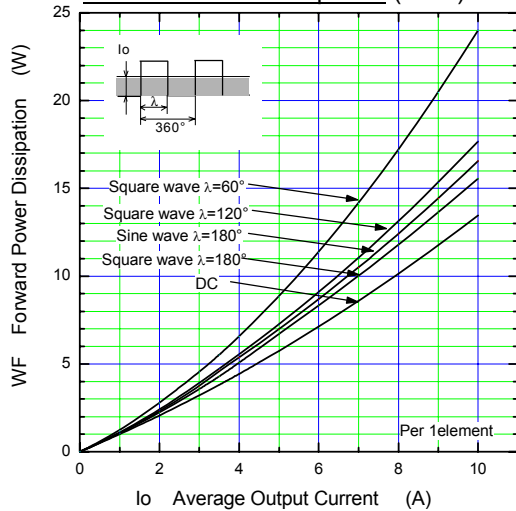
Forward Characteristic (typ.)



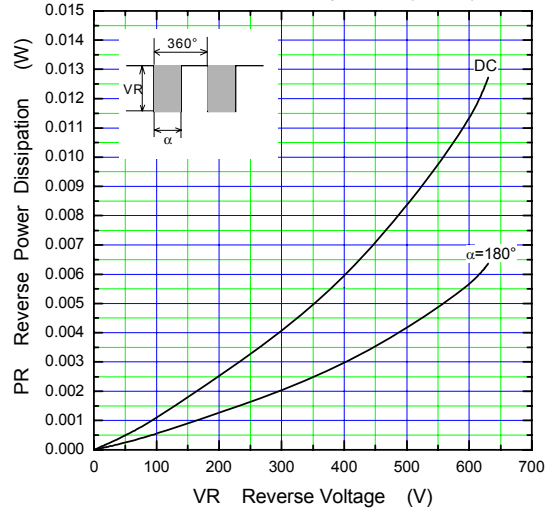
Reverse Characteristic (typ.)



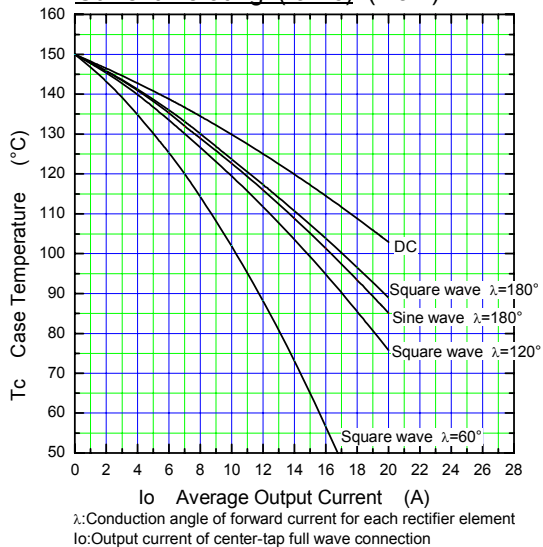
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)



Current Derating (I_o-T_c) (max.)



Junction Capacitance Characteristic (typ.)

