

YG961S6R (Ip 8A)

(Ip 8A / 600V)

Super LLD (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 continuous node)

■ Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		600	V
Non-Repetitive peak reverse voltage	V_{RSM}		600	V
Isolatin voltage	V_{ISO}	Terminals-to-Case, AC.1min	1500	V
Surge peak forward current	I_{PS}	$t_w \leq 200ns$	12	A
Peak forward current	I_P		8	A
Average output current	I_o	duty=1/2, $T_c=80^\circ C$ Square wave	2.5	A
Non-Repetitive surge current	I_{FSM}	Sine wave 10ms, 1shot	15	A
Operating junction temperature	T_j		150	$^\circ C$
Storage temperature	T_{stg}		-40 to +150	$^\circ C$

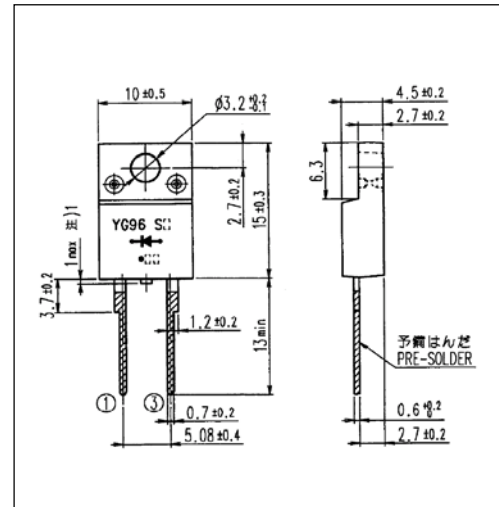
- Electrical characteristics ($T_a=25^\circ C$ Unless otherwise specified)

Item	Symbol	Conditions	Characteristics	Unit
Reverse recovery peak current	I_{RP}	$I_F=5A, -di/dt=200A/\mu s, V_R=380V, T_j=100^\circ C$	Typ. 1.9	A
Reverse recovery time	t_{rr}	$I_F=0.1A, I_R=0.2A, I_{rec}=0.05A$	Max. 23.0	ns
Forward voltage	V_F	$I_F=8A$	Max. 5.0	V
Reverse current	I_R	$V_R=V_{RRM}$	Max. 50.0	μA
Thermal resistance	$R_{th(j-c)}$	Junction to case	Max. 10.0	$^\circ C/W$

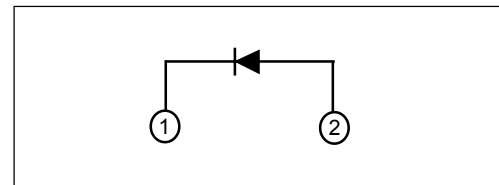
- Mechanical characteristics

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

■ Outline drawings, mm

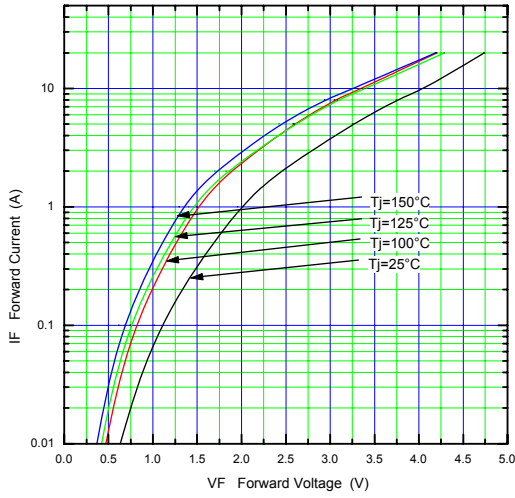


■ Connection diagram

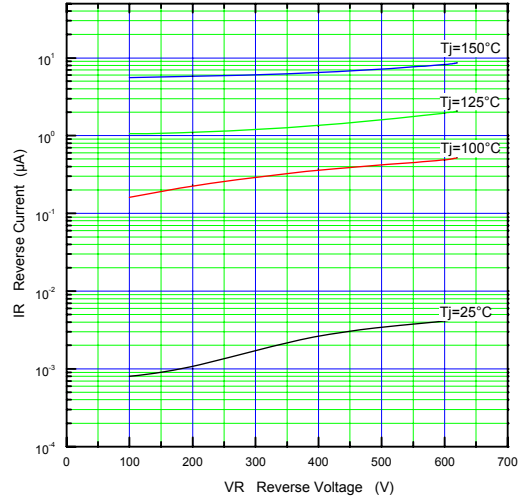


Characteristics

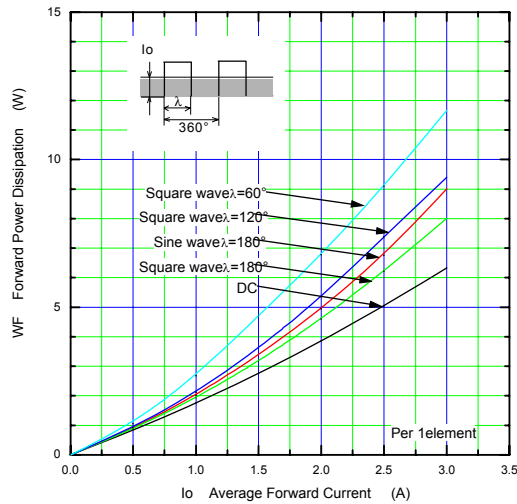
Forward Characteristic (typ.)



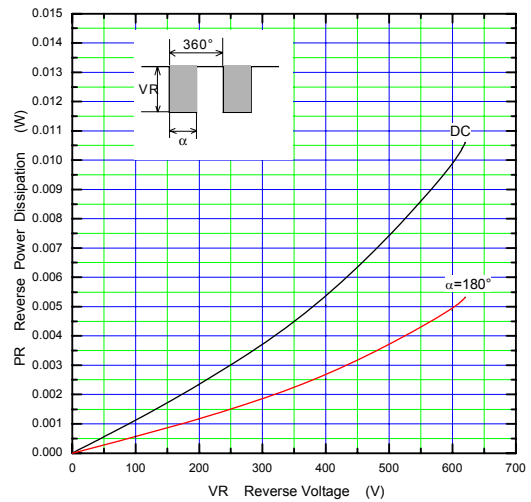
Reverse Characteristic (typ.)



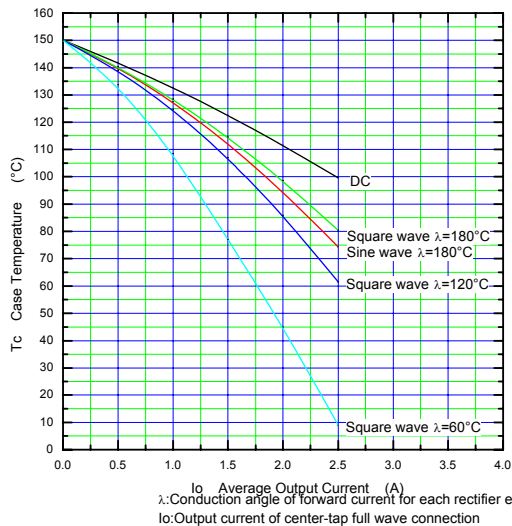
Forward Power Dissipation



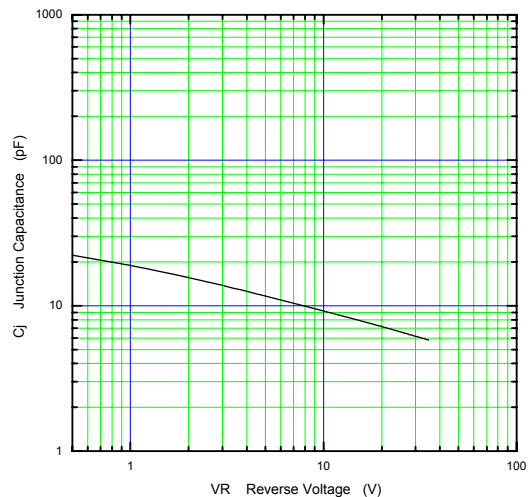
Reverse Power Dissipation



Current Derating (Io-Tc)

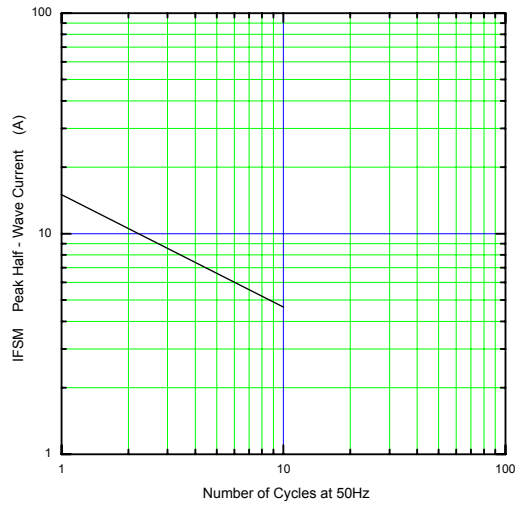


Junction Capacitance Characteristic (typ.)



Io: Average Output Current (A)
 λ: Conduction angle of forward current for each rectifier element
 Io: Output current of center-tap full wave connection

Surge Capability



Transient Thermal Impedance

