YG971S6R (Io 8A / 600V)

Fuji Electric

[200510]

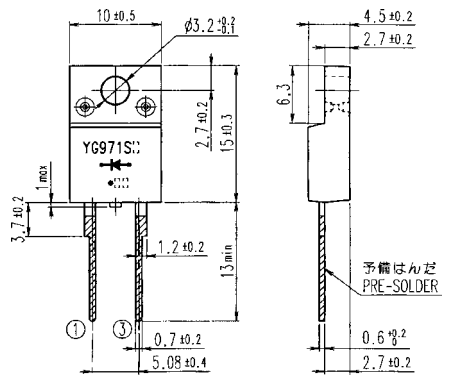
Super LLD II (For PFC circut)

(current discontinuous mode)

LOW LOSS SUPER HIGH SPEED RECTIFIER

■ Outline drawings, mm

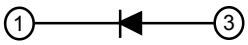
TO-220F



■ Features

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

■ Connection diagram



■ 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	Viso	Terminals-to-Case, AC. 1min.	1500	V
Average output current	I_O	Square wave duty=1/2, Tc=89°C	8	A
Non-Repetitive surge current	I_{FSM}	Sine wave10ms,1shot	70	A
Operating junction temperature	T_j		150	°C
Storage temperature	T_{stg}		-40 to +150	°C

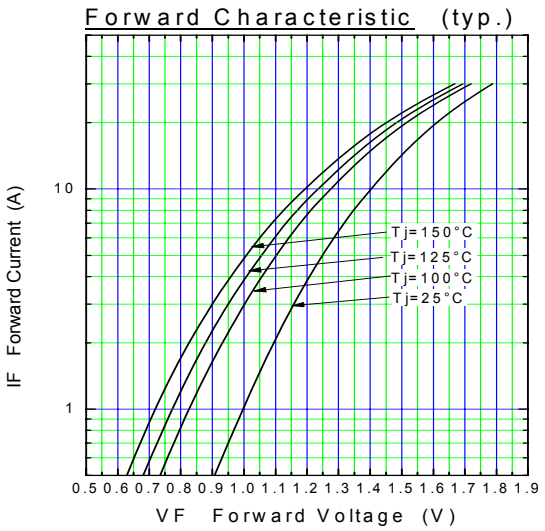
- Electrical characteristics (Ta=25°C Unless otherwise specified)

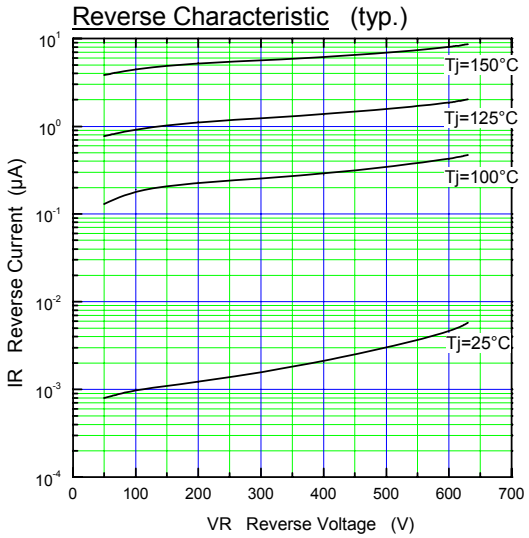
Item	Symbol	Conditions	Characteristics		Unit
Forward voltage	V_F	I_F=8A	Max	1.55	V
Reverse current	I_R	V_R=V_{RRM}	Max.	10.0	μA
Reverse recovery time	t rr	I_F=0.1A, I_R=0.2A, Irec=0.05A	Max.	50.0	ns
Thermal resistance	Rth(j-c)	Junction to case	Max.	4.5	°C/W

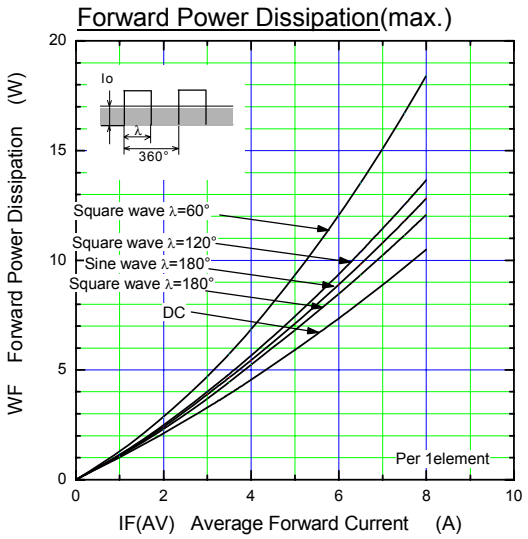
- Mechanical characteristics

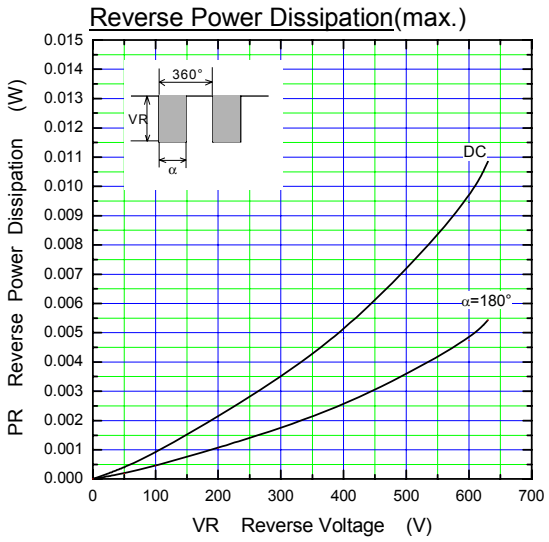
Mouunting torque	Recommended torque	0.3 to 0.5	N·m
Approximate mass		2.0	g

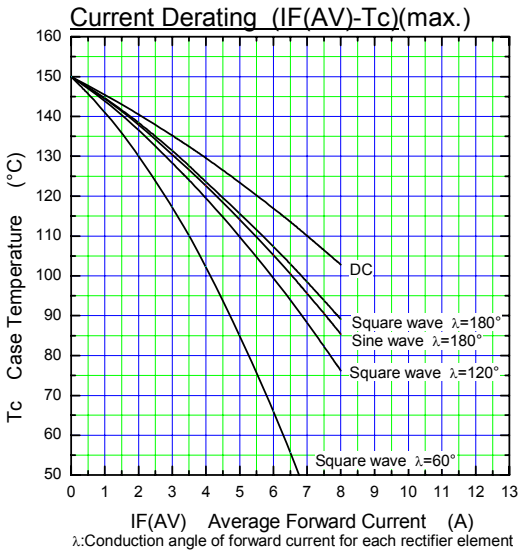
■ Characteristics



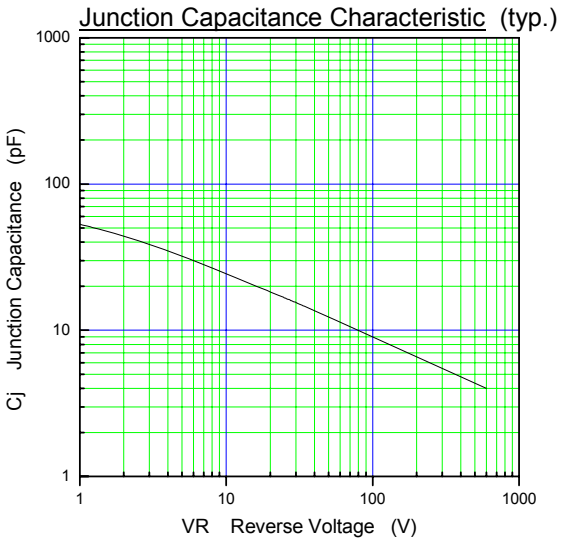


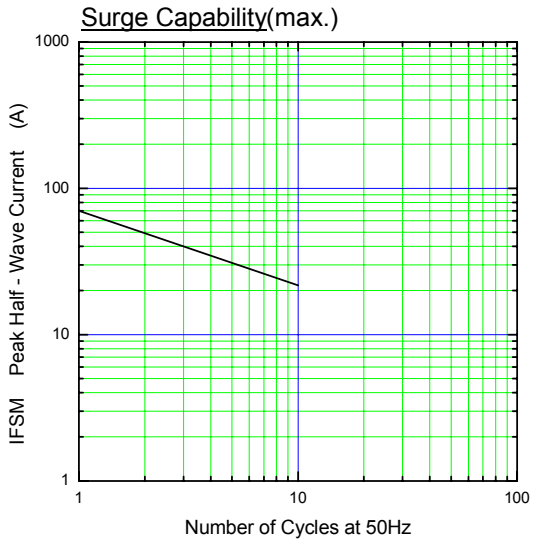


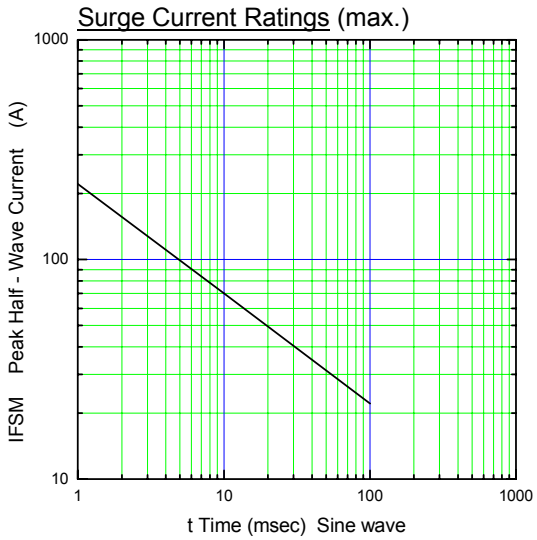


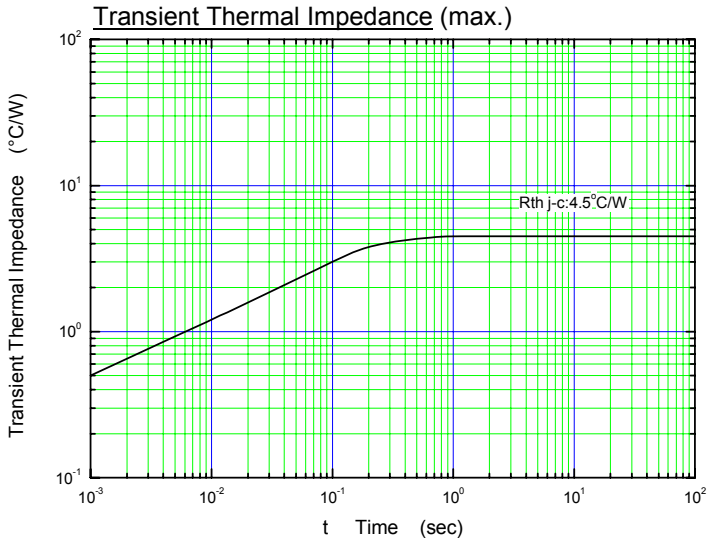


λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection




Surge Capability(max.)
IFSM Peak Half - Wave Current (A)
1000
100
10
1
1
10
100
Number of Cycles at 50Hz


Surge Current Ratings (max.)
IFSM Peak Half - Wave Current (A)
1000
100
10
1
10
100
1000
t Time (msec) Sine wave


Transient Thermal Impedance (max.)
Transient Thermal Impedance (°C/W)
Rth j-c:4.5°C/W
t Time (sec)