

PG985C6R (600V, 20A)

FUJI Diode

Super LLD III (For CCM-PFC) Low Loss Super High Speed Rectifier

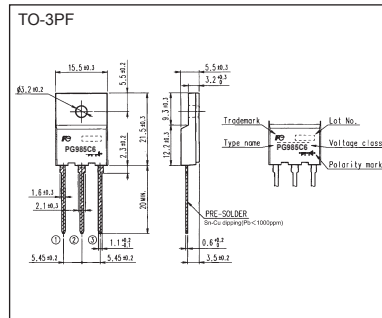
Features

- Lower power loss by higher switching speed and also lower V_F than conventional type
- Soft recovery and low noise

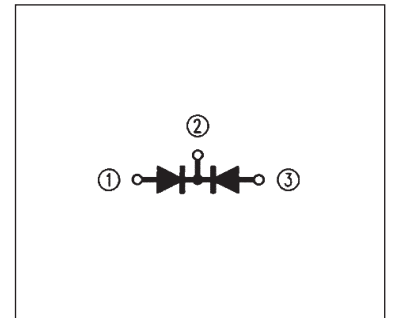
Applications

- PFC circuit (current continuous mode)

Outline Drawings [mm]



Connection diagram



Maximum Ratings and Characteristics

Maximum ratings (at $T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbols	Conditions	Ratings	Units
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 $T_c = 47^\circ\text{C}$, 50Hz	20 *	A
Non-repetitive surge current **	I_{FSM}	Sine wave, 10ms 1shot	50	A
Operating junction temperature	T_j		150	$^\circ\text{C}$
Storage temperature	T_{slg}		-40 to +150	$^\circ\text{C}$

*Out put current of center tap full wave connection.

**Rating per element

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

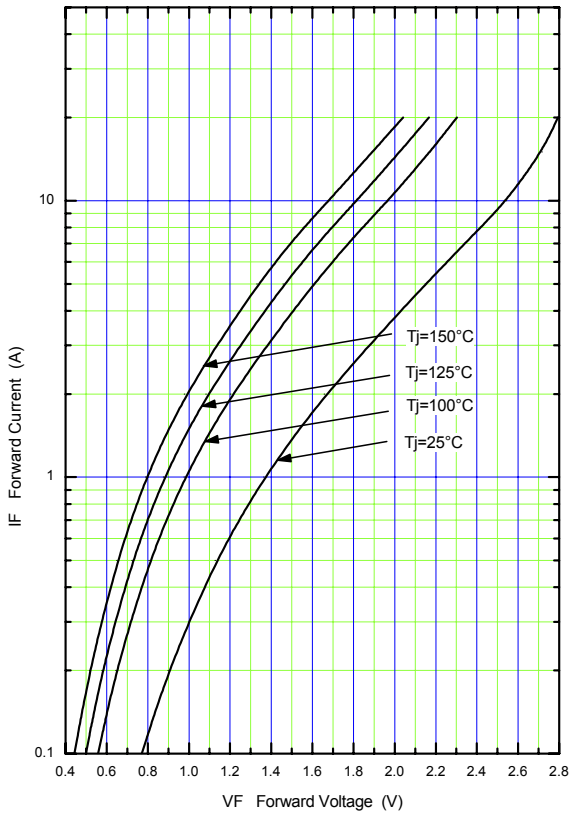
Item	Symbols	Conditions	Maximum	Units
Forward voltage***	V_F	$I_F = 10\text{A}$	3	V
Reverse current***	I_R	$V_R = V_{RRM}$	30	μA
Reverse recovery time***	t_{rr}	$I_F = 0.1\text{A}$, $I_R = 0.2\text{A}$, $I_{rec} = 0.05\text{A}$	0.028	μs
Thermal resistance	$R_{th(j-c)}$	Junction to case	2	$^\circ\text{C/W}$

***Rating per element

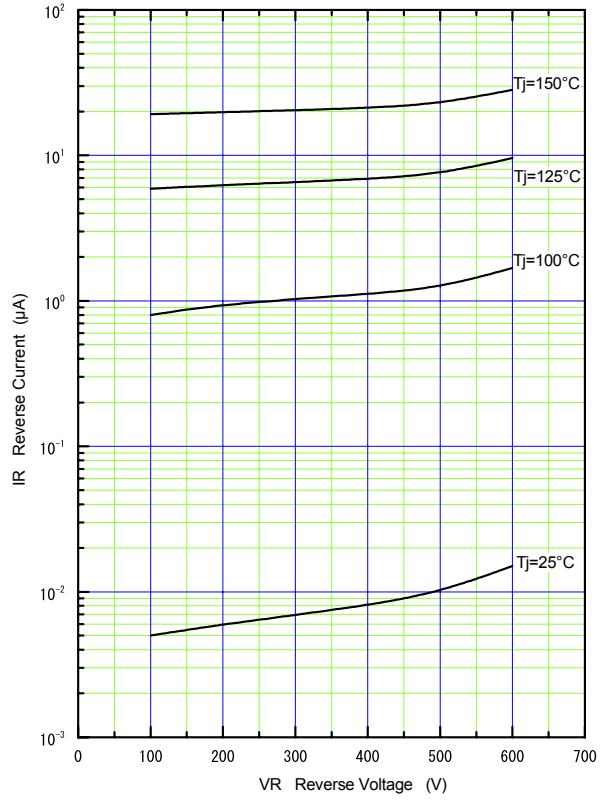
Mechanical characteristics

Item	Conditions	Ratings	Units
Mounting torque	Recommended torque	0.4 to 0.6	N·m
Approximate mass		6.0	g

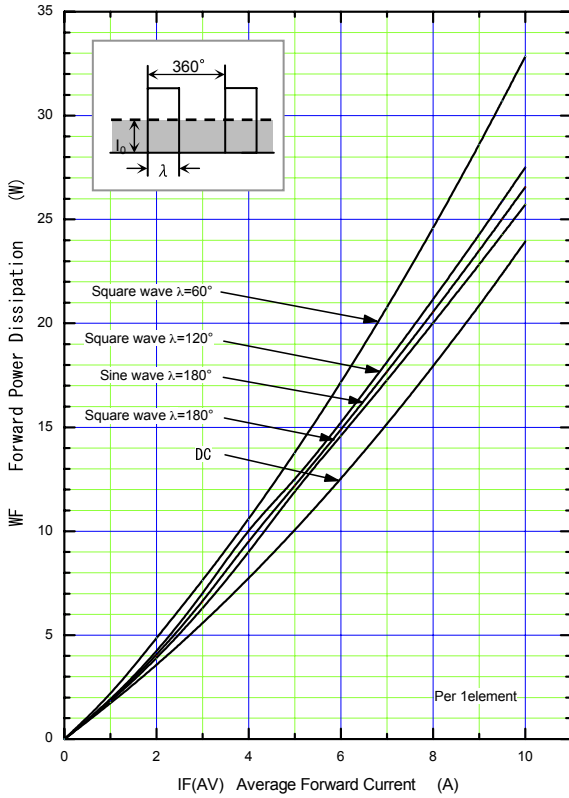
Forward Characteristic (typ.)



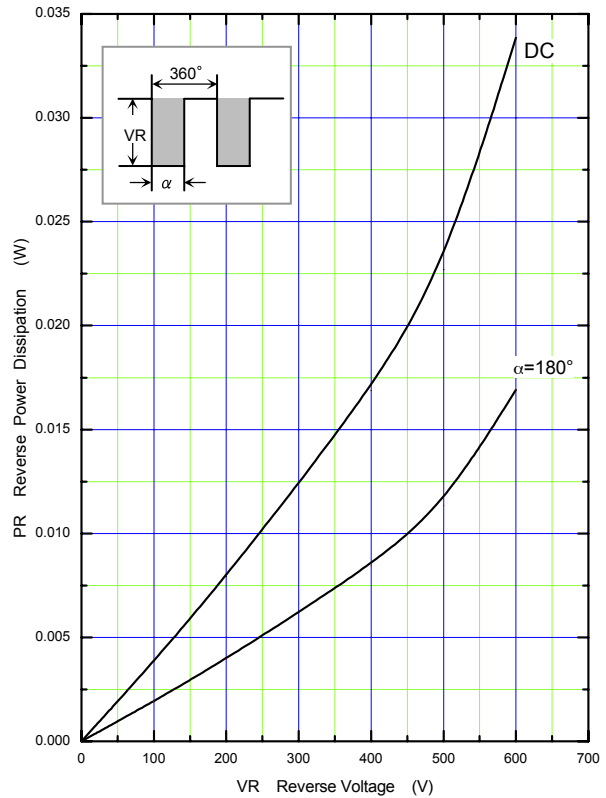
Reverse Characteristic (typ.)

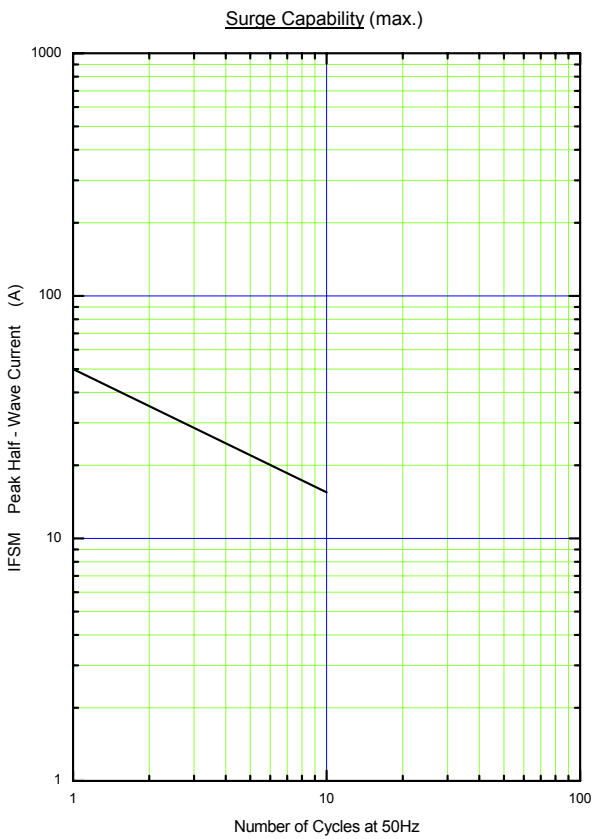
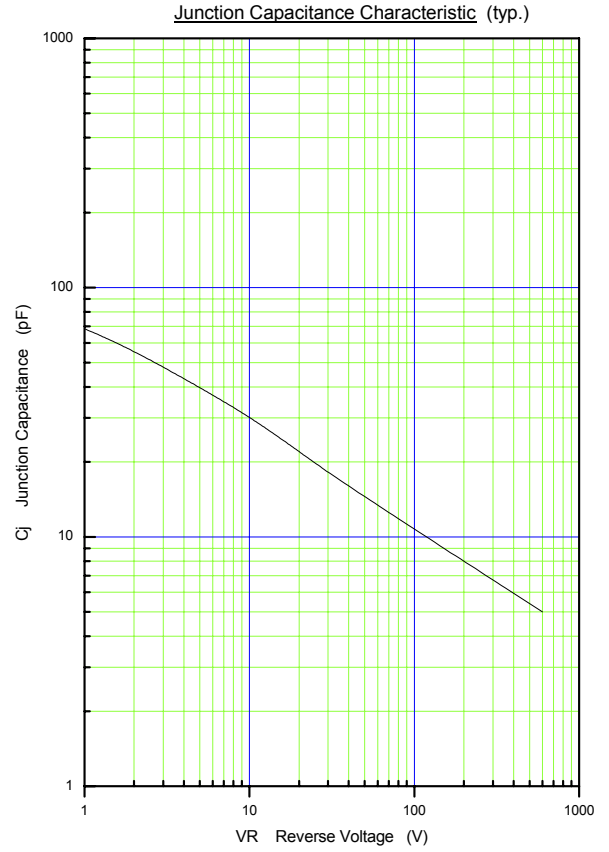
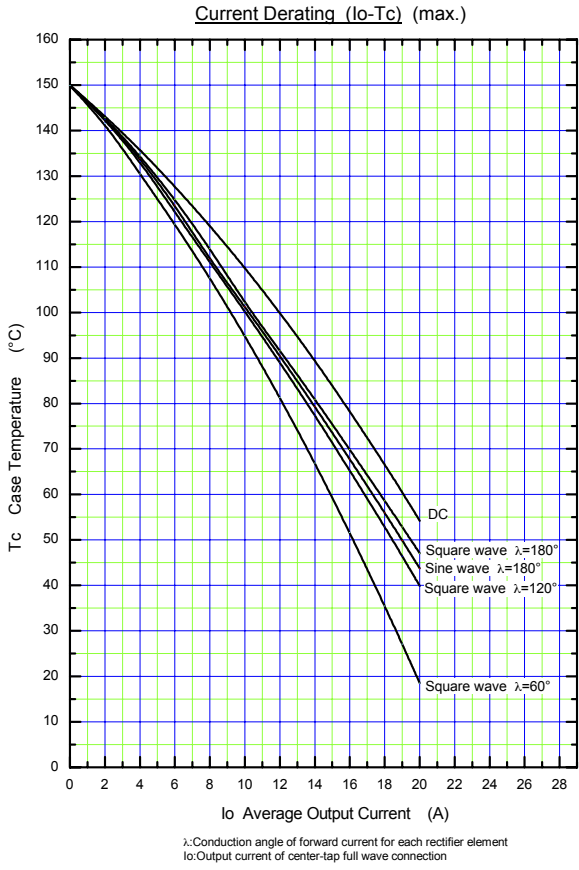


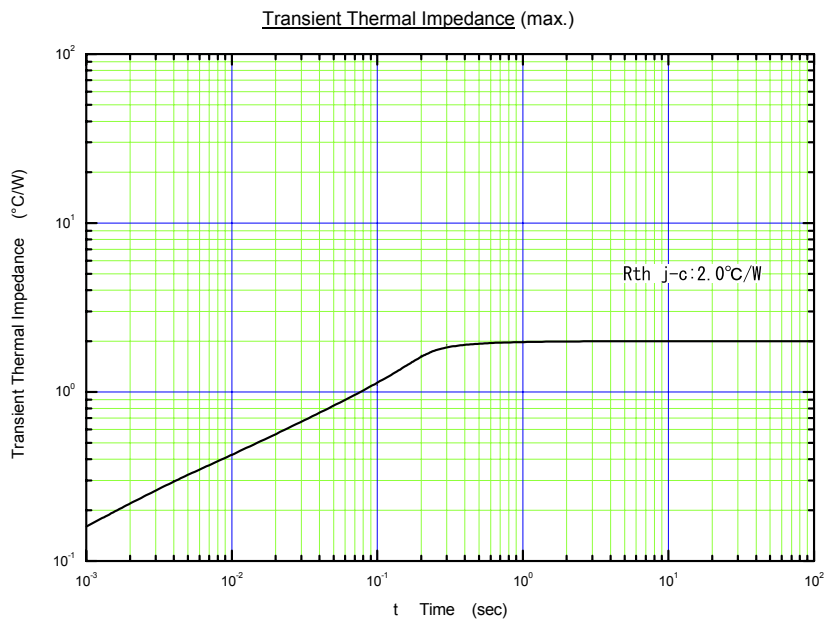
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)







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