PG985C6R (600V, 20A)

FUJI Diode

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

Features

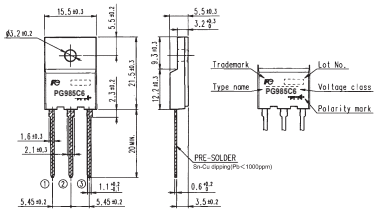
- Lower power loss by higher switching speed and also lower V_F than conventional type
- Soft recovery and low noise

Applications

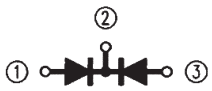
- PFC circuit (current continuous mode)

Outline Drawings [mm]

TO-3PF



Connection diagram



Maximum Ratings and Characteristics

● **Maximum ratings (at Ta=25˚C Unless otherwise specified)**

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

*Out put current of center tap full wave connection
**Rating per element

● **Electrical characteristics (at Ta=25˚C Unless otherwise specified)**

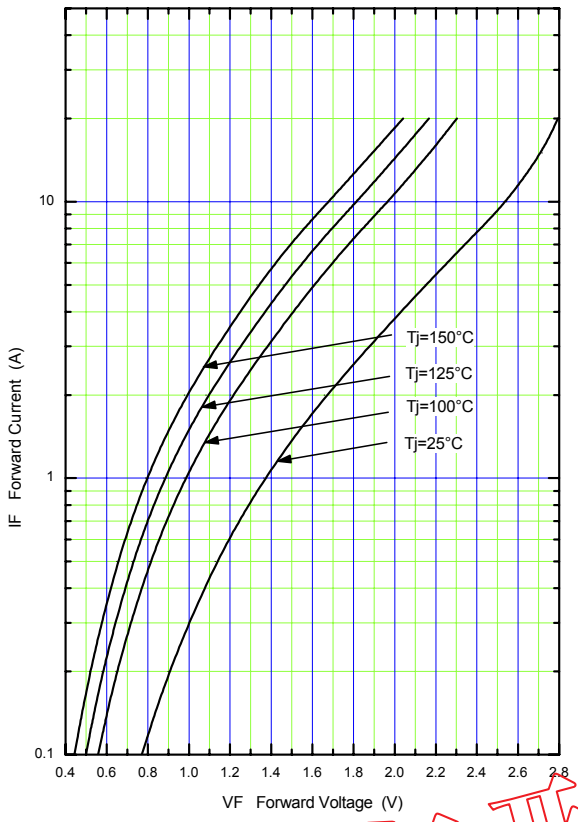
Item	Symbols	Conditions	Maximum	Units
Forward voltage***	V_F	I_F = 10A	3	V
Reverse current***	I_R	$V_R = V_{RRM}$	30	μA
Reverse recovery time***	t_{rr}	I_F = 0.1A, I_R = 0.2A, I_{rec} = 0.05A	0.028	μs
Thermal resistance	Rth(j-c)	Junction to case	2	˚C/W

***Rating per element

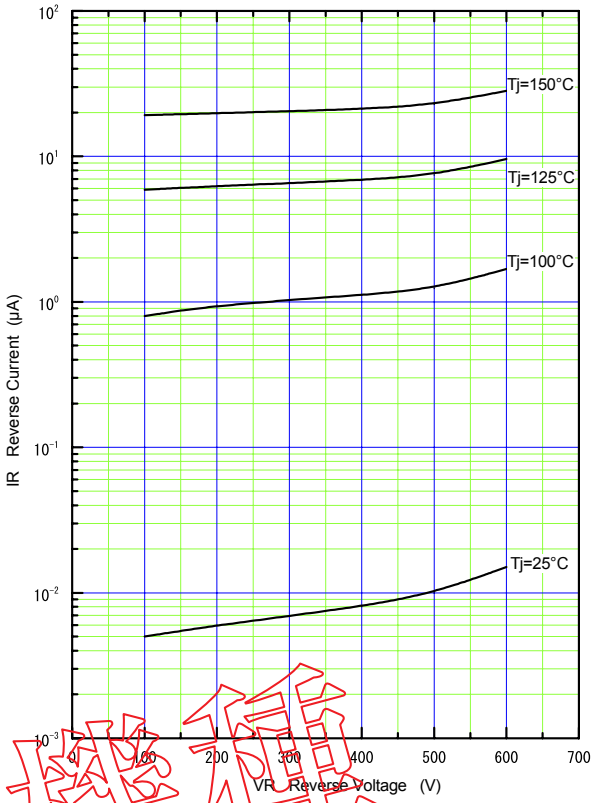
● **Mechanical characteristics**

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

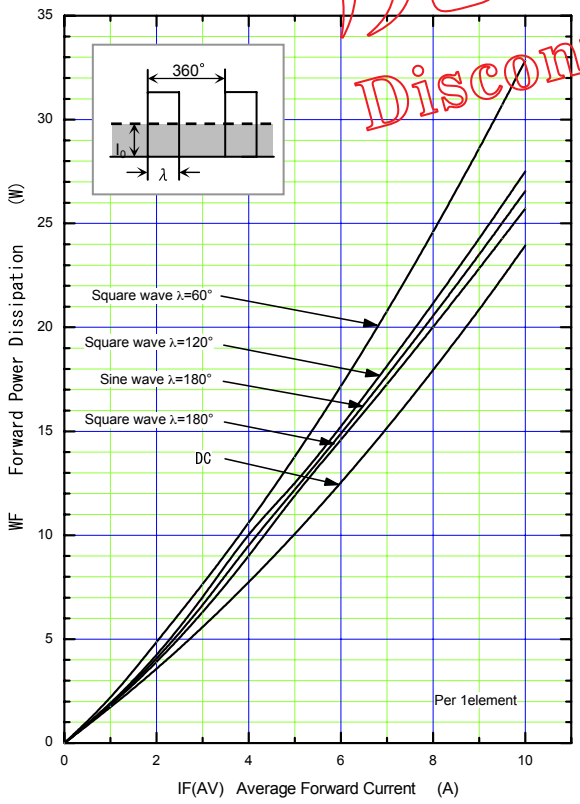
Forward Characteristic (typ.)



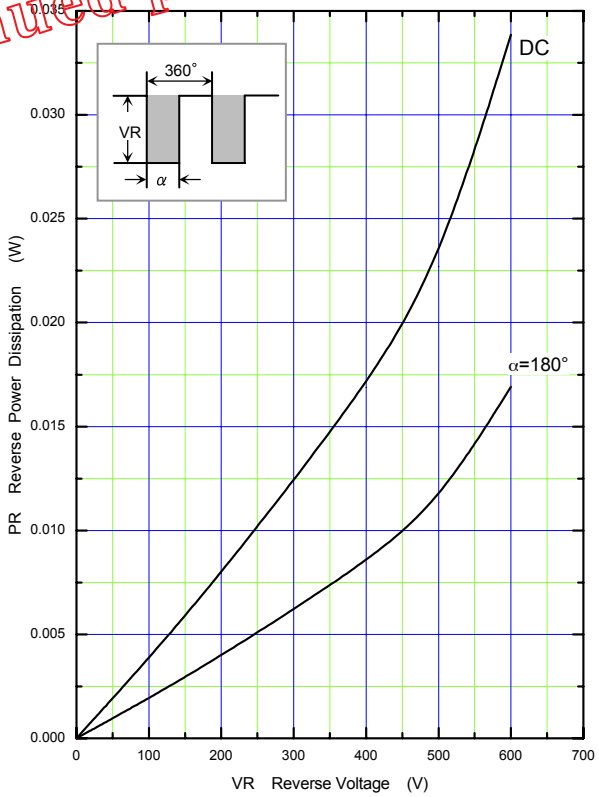
Reverse Characteristic (typ.)



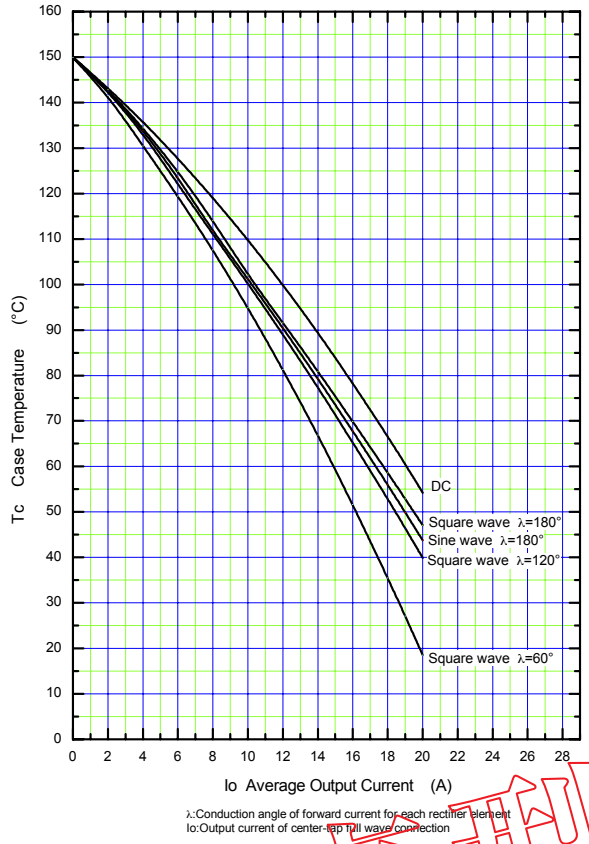
Forward Power Dissipation (max.)



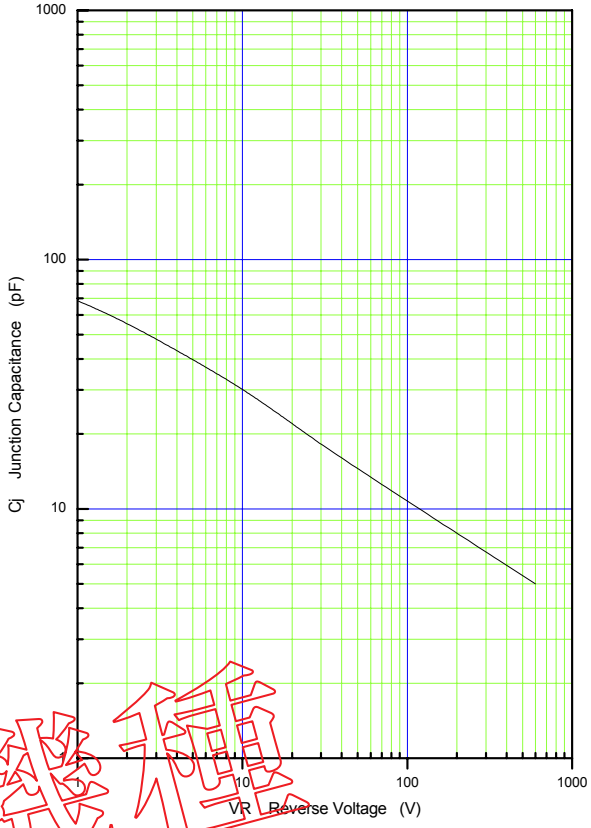
Reverse Power Dissipation (max.)



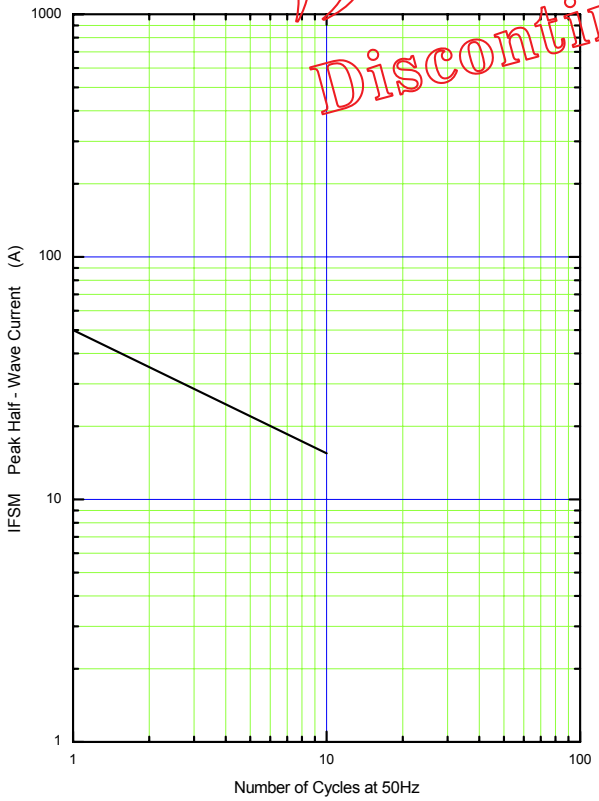
Current Derating (Io-Tc) (max.)



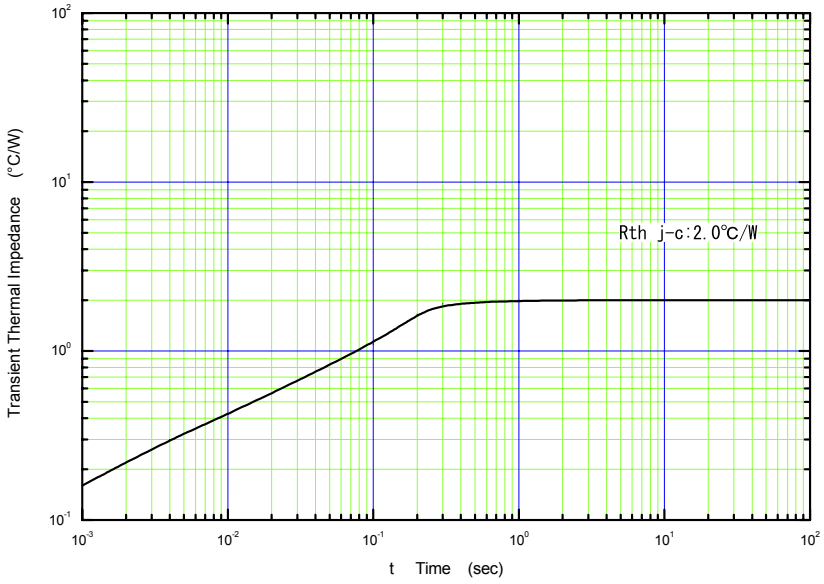
Junction Capacitance Characteristic (typ.)



Surge Capability (max.)



Transient Thermal Impedance (max.)



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   - OA equipment
   - Communications equipment (terminal devices)
   - Measurement equipment
   - Machine tools
   - Audiovisual equipment
   - Electrical home appliances
   - Personal equipment
   - Industrial robots etc.

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   - Traffic-signal control equipment
   - Gas leakage detectors with an auto-shut-off feature
   - Emergency equipment for responding to disasters and anti-burglary devices
   - Safety devices
   - Medical equipment

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