YG878C10R (100V, 30A)

FUJI Diode

Ultra Low IR Schottky Barrier Diode

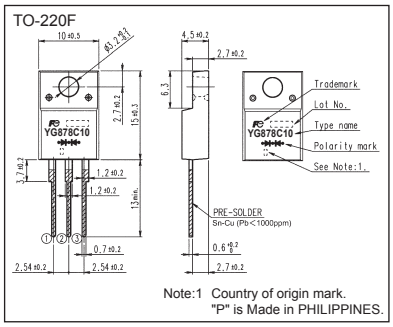
Features

- Ultra Low IR
- Low V_F
- Tj MAX = 175˚C
- High reliability at higher temperatures

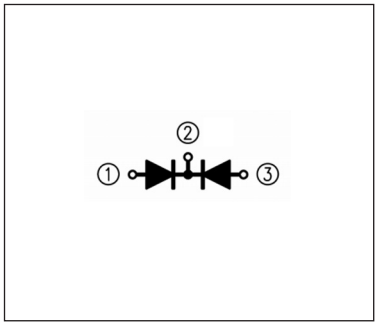
Applications

- High frequency operation
- DC-DC converters
- AC adapter

Outline Drawings [mm]



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}		100	V
Isolating voltage	Viso	Terminals-to-case, AC.1min	1500	V
Average output current	I_O	50Hz Square wave duty =1/2 Tc =122˚C	30 *	A
Non-repetitive surge current **	I_{FSM}	Sine wave, 10ms 1shot	160	A
Operating junction temperature	T_j		175	˚C
Storage temperature	T_{stg}		-40 to +175	˚C

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

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

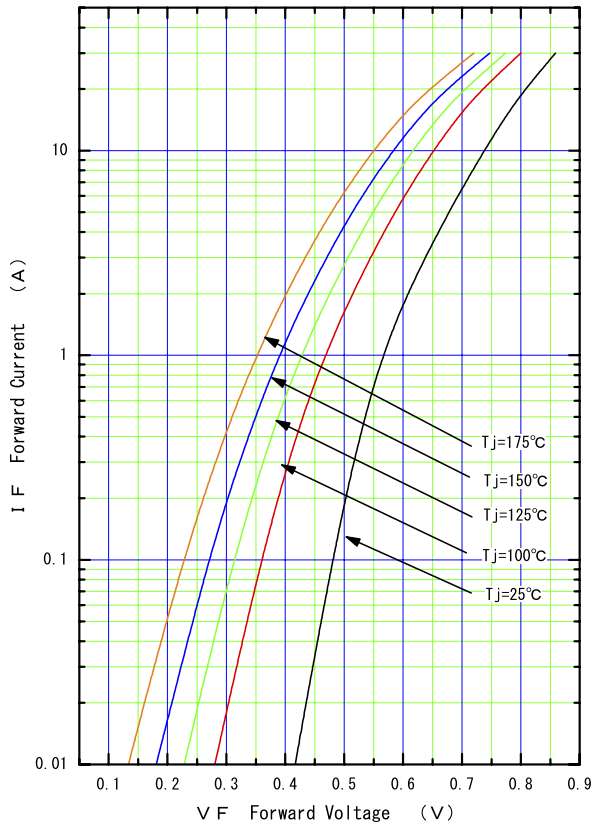
Item	Symbols	Conditions	Maximum	Units
Forward voltage***	V_F	I_F = 15 A	0.86	V
Reverse current***	I_R	V_R =V_{RRM}	30	μA
Thermal resistance	Rth(j-c)	Junction to case	2	˚C/W

***Rating per element

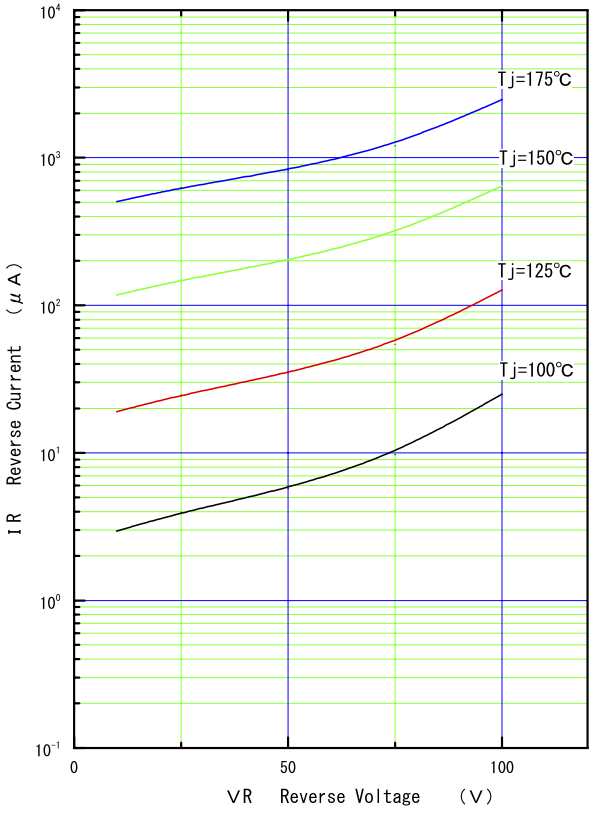
● Mechanical characteristics

Item	Conditions	Ratings	Units
Mounting torque	Recommended torque	0.3 to 0.5	N•m
Approximate mass		2.0	g

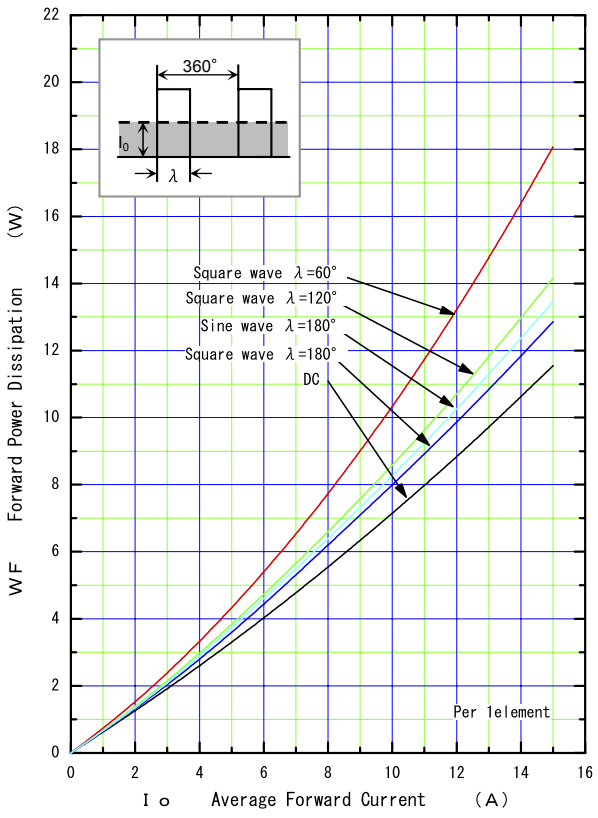
Forward Characteristic (typ.)



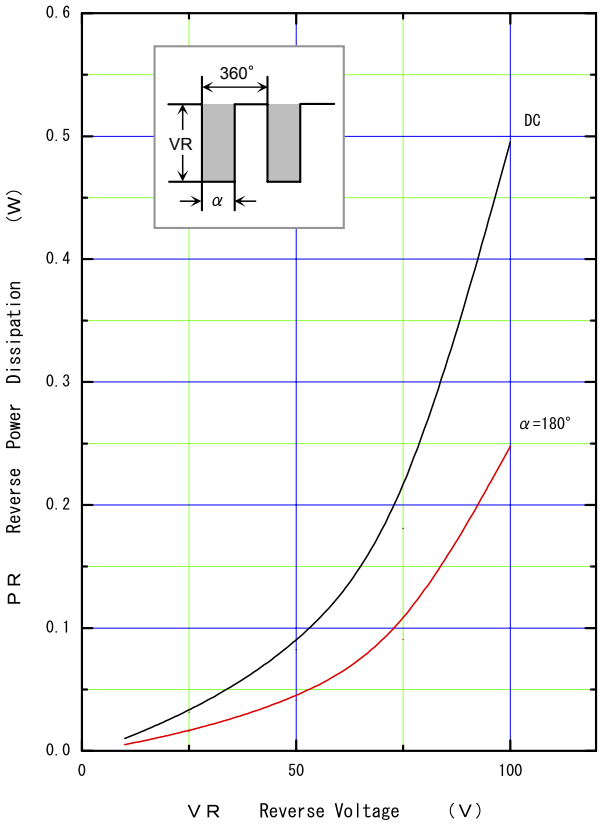
Reverse Characteristic (typ.)



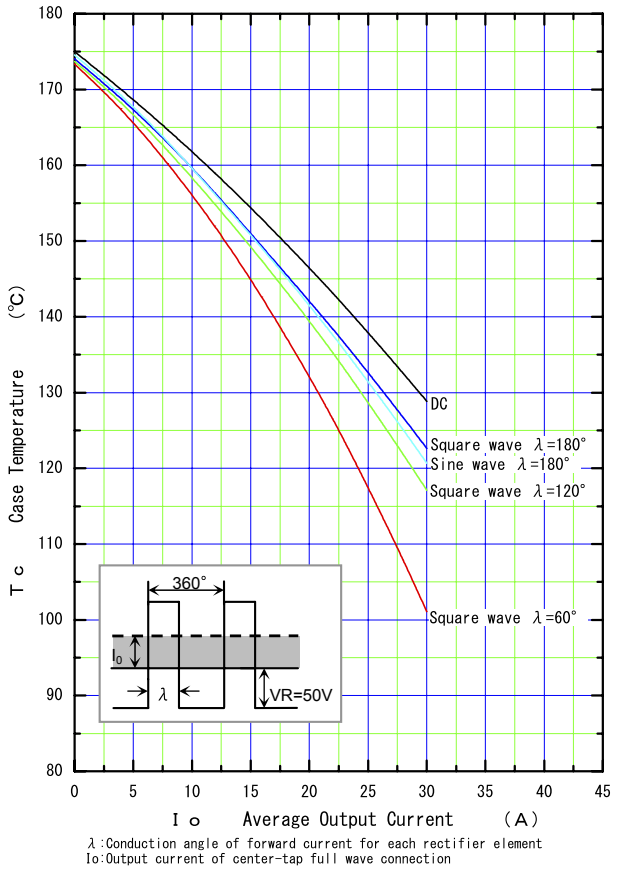
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)

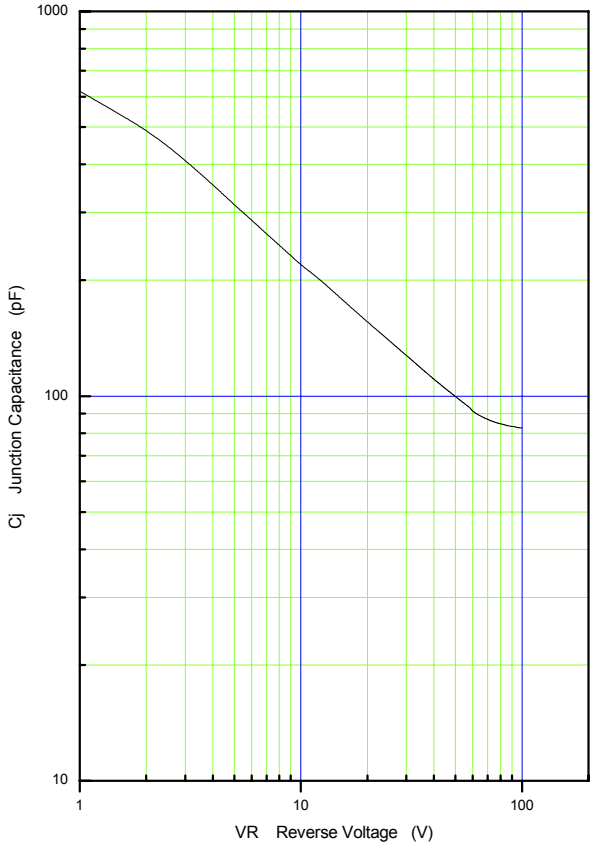


Current Derating (Io-Tc) (max.)

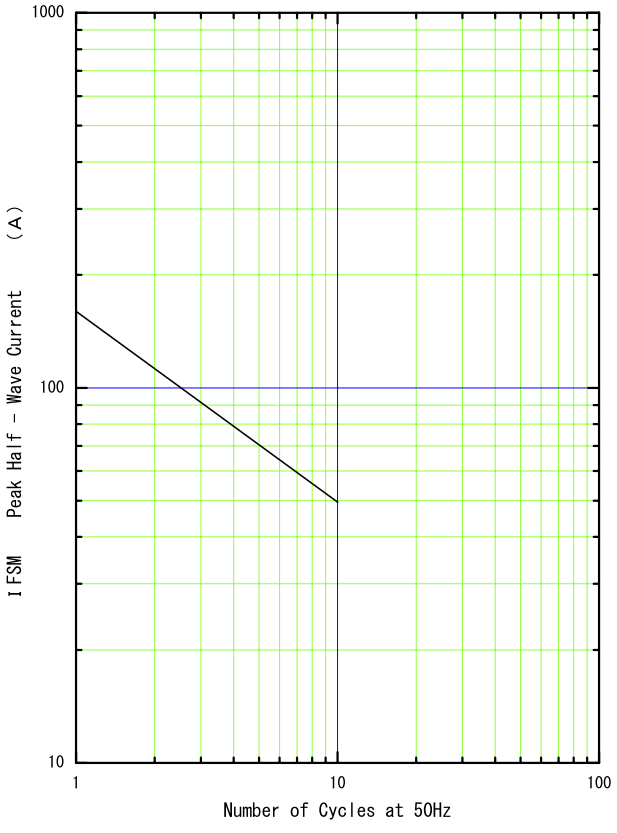


λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection

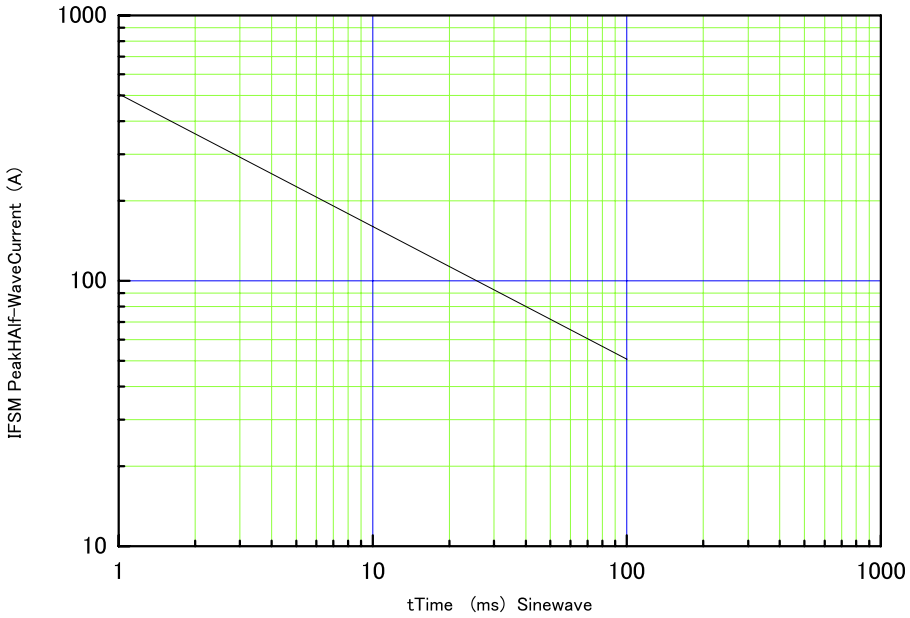
Junction Capacitance Characteristic (max.)



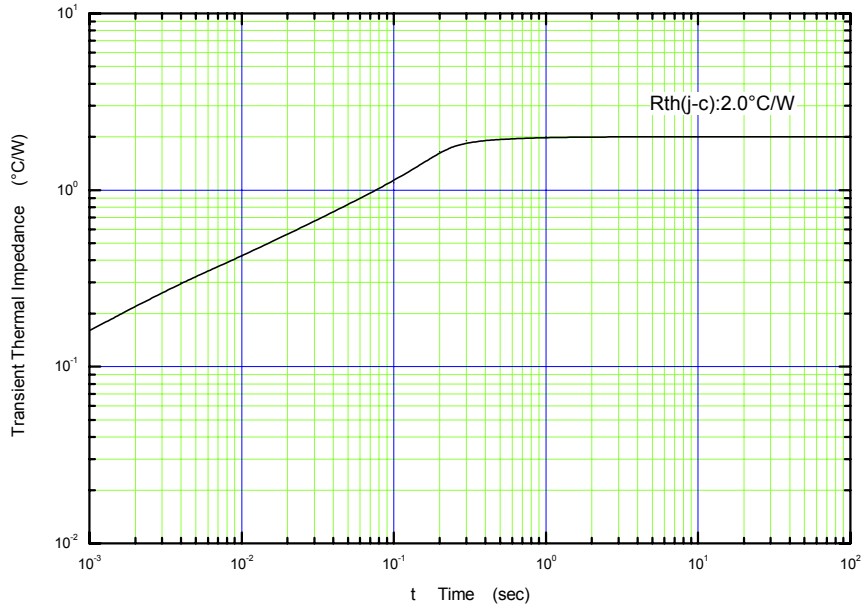
Surge Capability (max.)



Surge Current Ratings (max.)



Transient Thermal Impedance (max.)



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   • Medical equipment

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