TS865C10R (100V/20A)

Fuji Electric

[200509]

Low IR Schottky barrier diode

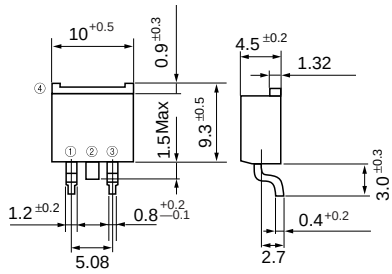
■ Features

- Low IR
- Low V_F
- Center tap connection

■ Applications

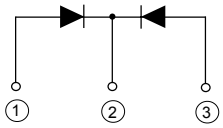
- High frequency operation
- DC-DC converters
- AC adapter

■ Outline drawings, mm



Package : T-pack
Epoxy resin UL : V-0

■ Connection diagram



■ Maximum ratings and characteristics

● Maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak surge reverse voltage	V_{RSM}	tw=500ns, duty=1/40	100	V
Repetitive peak reverse voltage	V_{RRM}		100	V
Isolating voltage	Viso	Terminals-to-Case, AC.1min.	1500	V
Average output current	Io	Square wave, duty=1/2 Tc=117°C	20 *	A
Non-repetitive surge current	I_{FSM}	Sine wave 10ms	145	A
non-repetitive reverse surge power dissipation	PRM	tw=10μs, Tj=25°C	660	W
Operating junction temperature	T_j		+150	°C
Storage temperature	T_{stg}		-40 to +150	°C

* Out put current of center tap full wave connection

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

Item	Symbol	Conditions	Max.	Unit
Forward voltage **	V_F	I_F=10A	0.86	V
Reverse current **	I_R	V_R=100V	175	μA
Thermal resistance	Rth(j-c)	Junction to case	1.75	°C/W

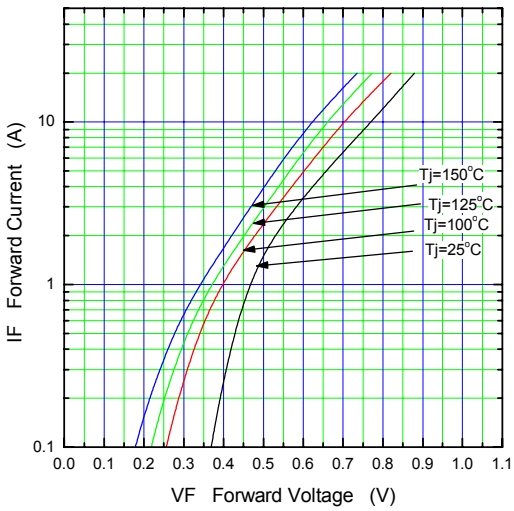
**Rating per element

● Mechanical characteristics

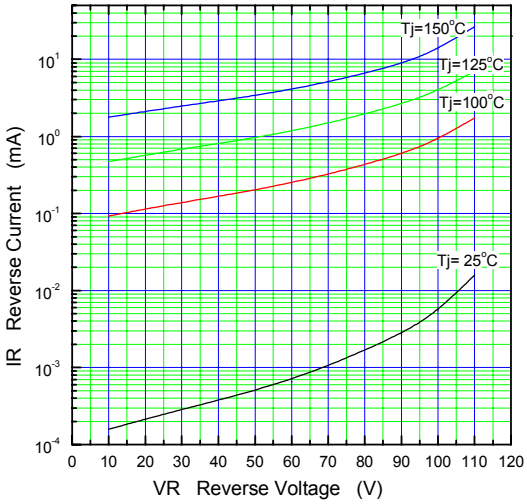
Mounting torque	Recommended torque	0.3 to 0.5	N·m
Approximate mass		2	g

■ Characteristics

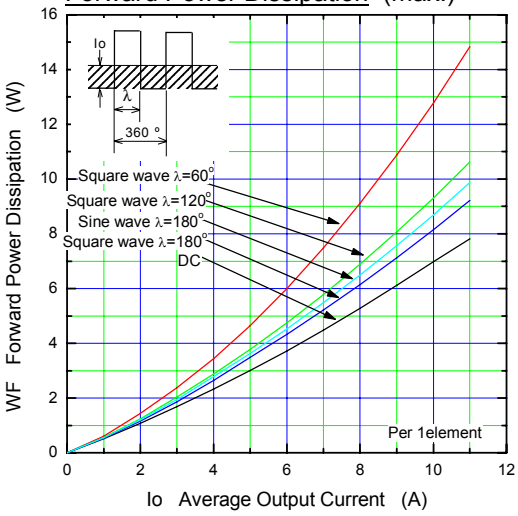
Forward Characteristic (typ.)



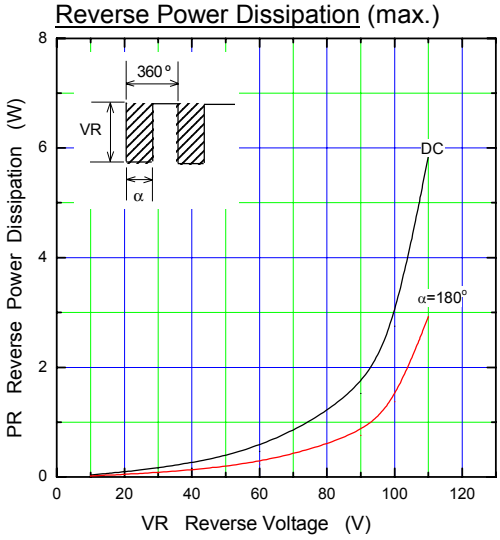
Reverse Characteristic (typ.)



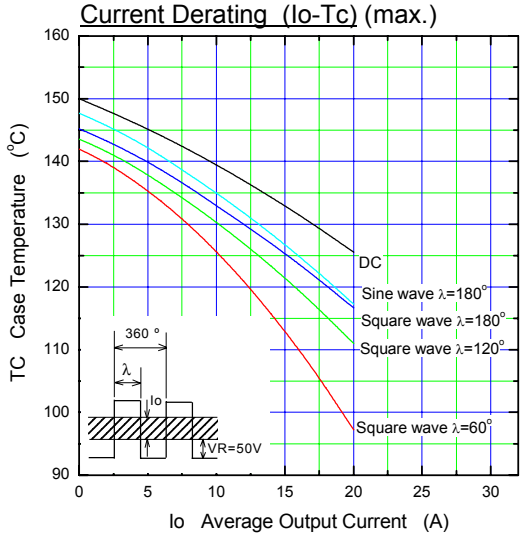
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)

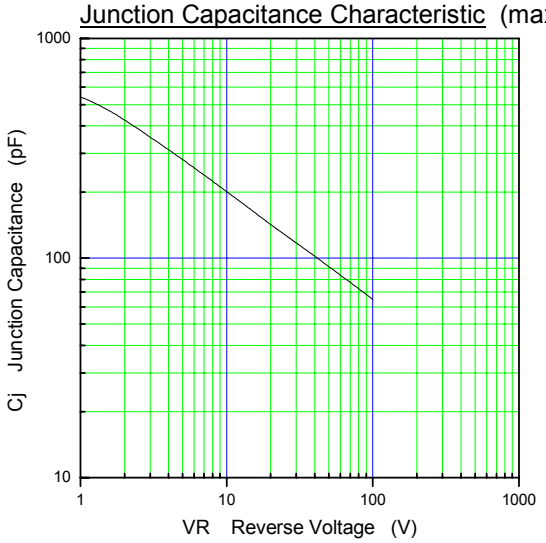


Current Derating (Io-Tc) (max.)

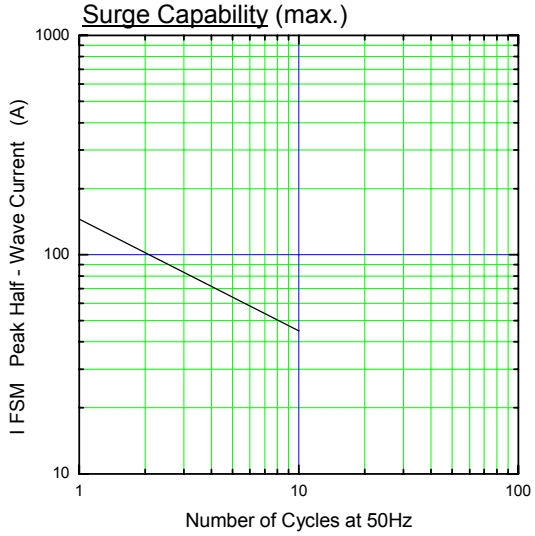


λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection

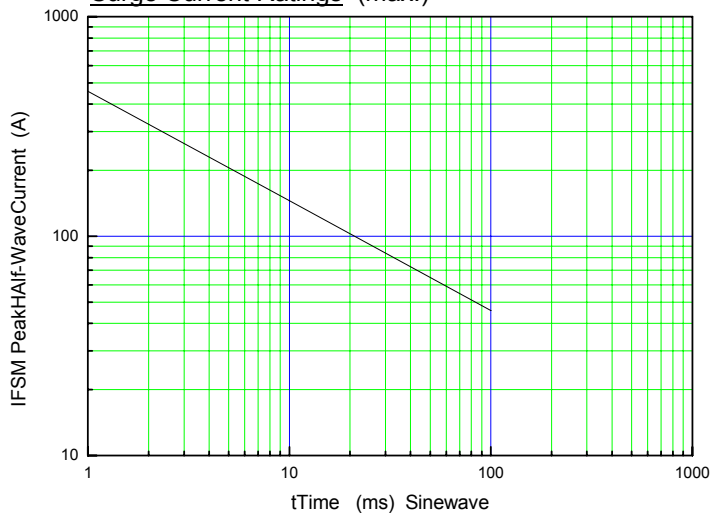
Junction Capacitance Characteristic (max.)



Surge Capability (max.)



Surge Current Ratings (max.)



Transient Thermal Impedance (max.)