

TP902C3 (10A)

(300V / 10A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

Features

- Low VF
- Super high speed switching
- High reliability by planer design

Applications

- High speed power switching

Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V _{RRM}		300	V
Average output current	I _O	Square wave, duty=1/2, T _c =125°C	10*	A
Surge current	I _{FSM}	Sine wave 10ms	40	A
Operating junction temperature	T _j		-40 to +150	°C
Storage temperature	T _{stg}		-40 to +150	°C

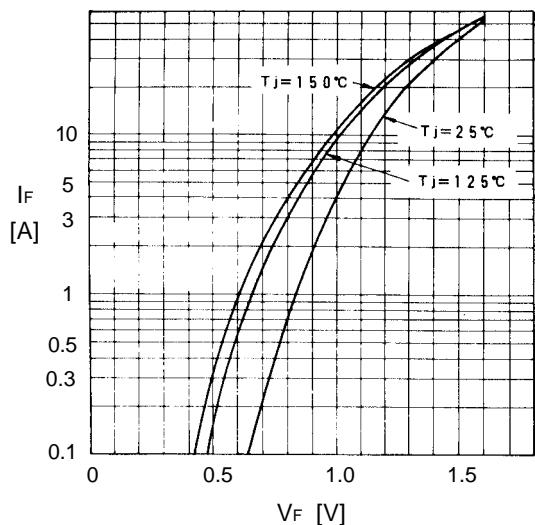
* Average forward current of centertap full wave connection

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

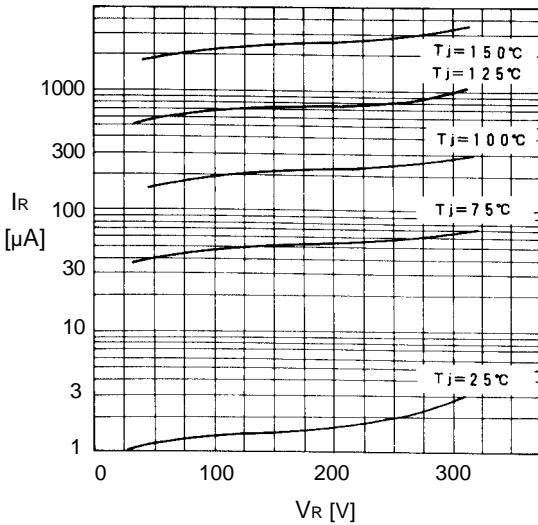
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V _{FM}	I _{FM} =5.0A	1.2	V
Reverse current	I _{RRM}	V _R =V _{RRM}	100	µA
Reverse recovery time	t _{rr}	I _f =0.1A, I _r =0.2A, I _{rec} =0.05A	35	ns
Thermal resistance	R _{th(j-c)}	Junction to case	2.5*	°C/W

■ Characteristics

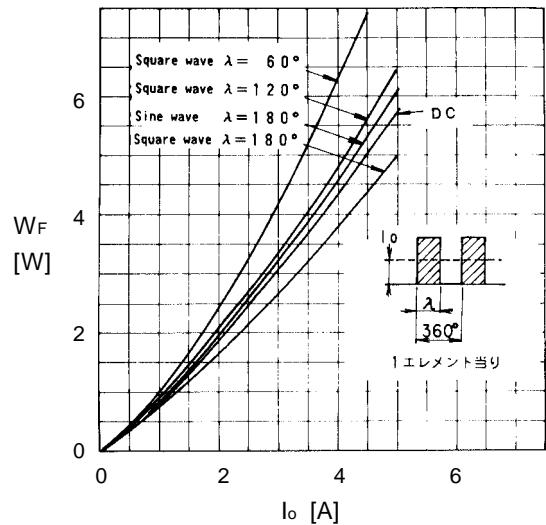
Forward characteristics



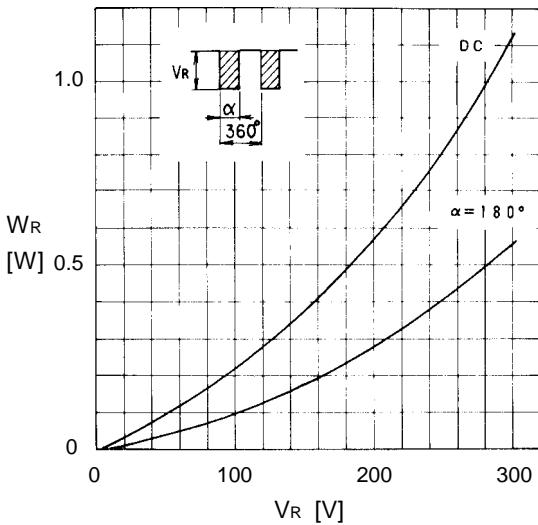
Reverse characteristics



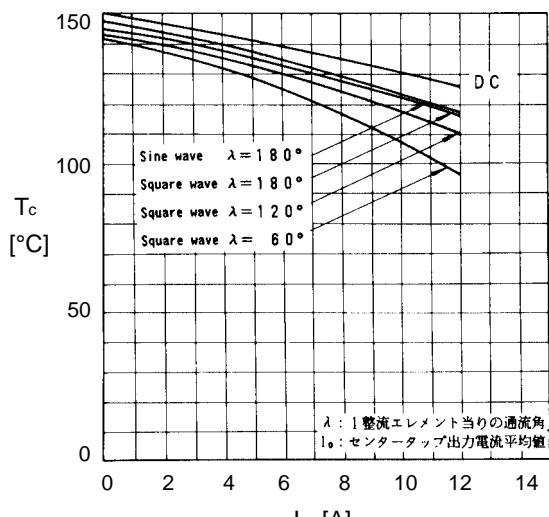
Forward power dissipation



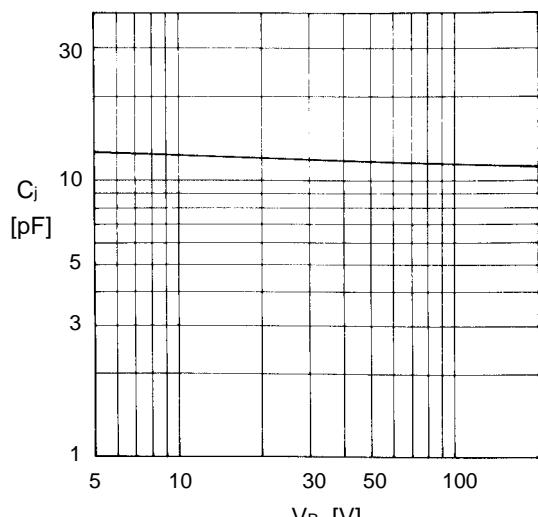
Reverse power dissipation



Output current-case temperature



Junction capacitance characteristics



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Transient thermal impedance

