

FAST RECOVERY DIODE

■ Features

- Soft recovery, low noise
- High reliability

■ Applications

- High speed power switching

■ Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
			-02	
Repetitive peak reverse voltage	V_{RRM}		200	V
Non-Repetitive peak reverse voltage	V_{RSM}		200	V
Average output current	I_o	Square wave duty=1/2, $T_c=110^\circ C$	5*	A
Surge current	I_{FSM}	Sine wave 10ms	30	A
Operating junction temperature	T_j		-40 to +150	°C
Storage temperature	T_{stg}		-40 to +150	°C

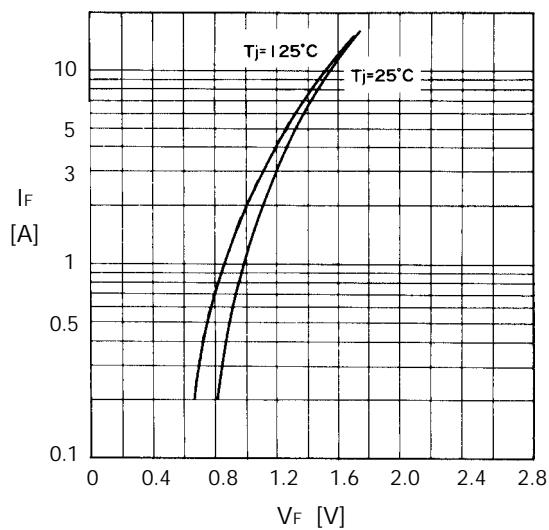
* Average forward current of centertap full wave connection

- Electrical characteristics ($T_a=25^\circ C$ Unless otherwise specified)

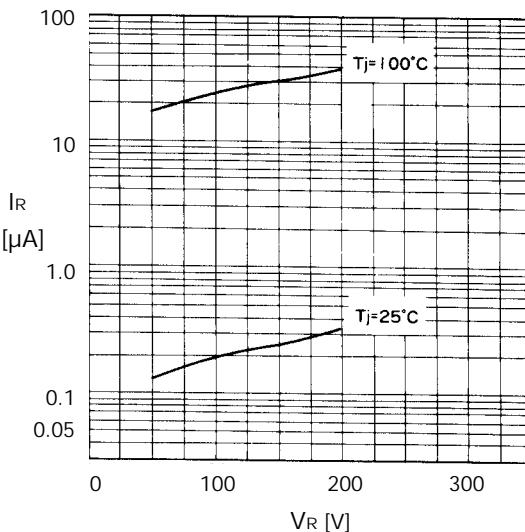
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=2.5A$	1.4	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	100	μA
Reverse recovery time	t_{rr}	$I_F=0.1A, I_R=0.1A$	100	ns
		$I_F=0.1A, I_R=0.2A, I_{rec}=0.05A$	45	
Thermal resistance	$R_{th(j-c)}$	junction to case	5.0	°C/W

■ Characteristics

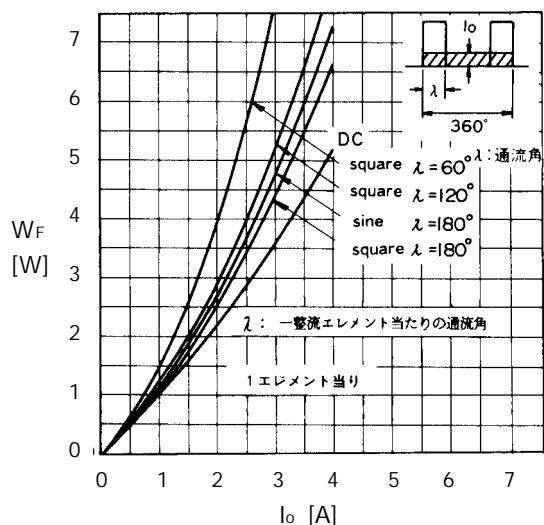
Forward characteristics



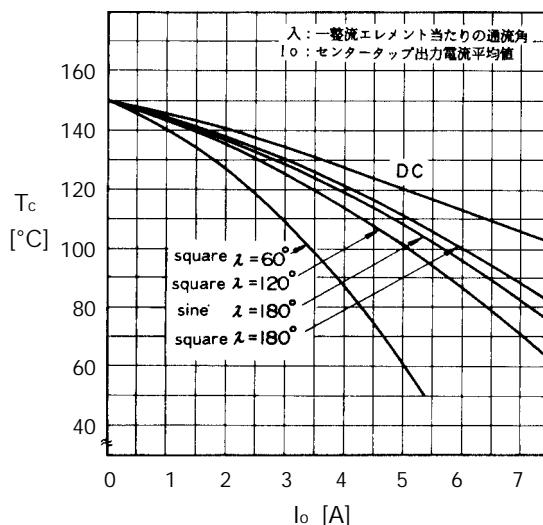
Reverse characteristics



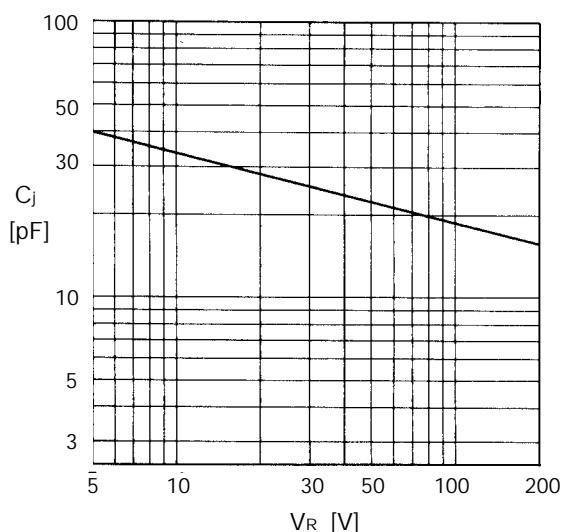
Forward power dissipation



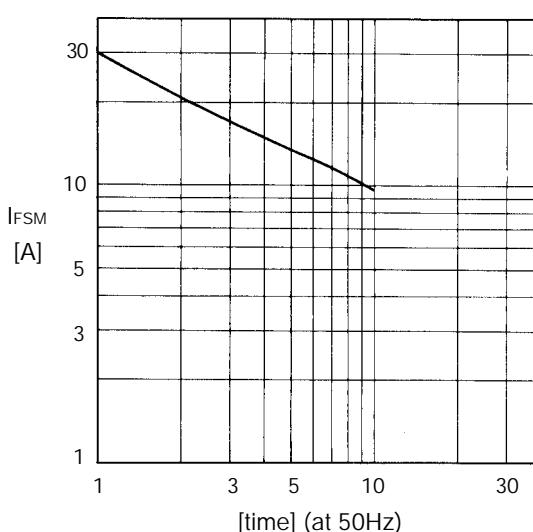
Output current-case temperature



Junction capacitance characteristics



Surge capability



Transient thermal impedance

