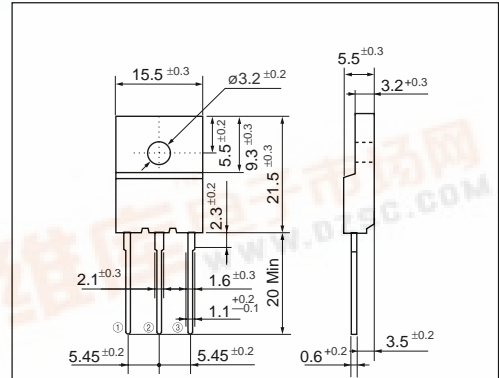


ESAD92M-02 (20A)

(200V / 20A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

Outline drawings, mm



JEDEC	—
EIAJ	—

Features

- Insulated package by fully molding
- Low VF
- Super high speed switching
- High reliability by planer design

Applications

- High speed power switching

Maximum ratings and characteristics

- Absolute maximum ratings

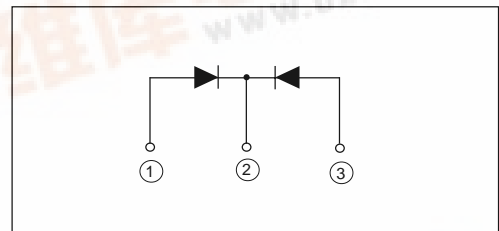
Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		200	V
Average output current	I_o	Square wave, duty=1/2, $T_c=108^{\circ}C$	20*	A
Surge current	I_{FSM}	Sine wave 10ms	100	A
Operating junction temperature	T_j		-40 to +150	$^{\circ}C$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}C$

*Average forward current of centertap full wave connection

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

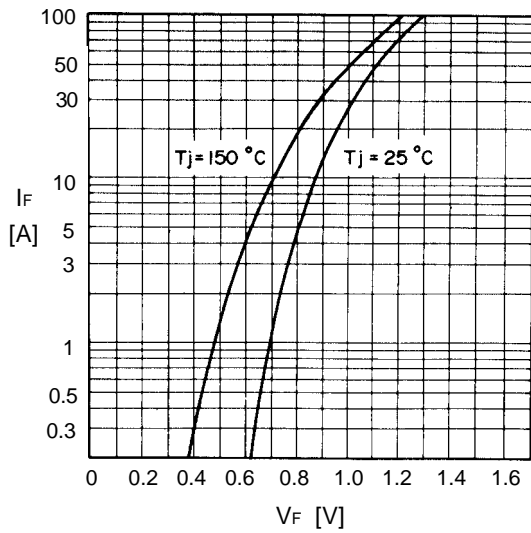
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=10A$	0.95	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	100	μA
Reverse recovery time	t_{rr}	$I_F=0.1A, I_R=0.2A, I_{rec}=0.05A$	40	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.0*	$^{\circ}C/W$

Connection diagram

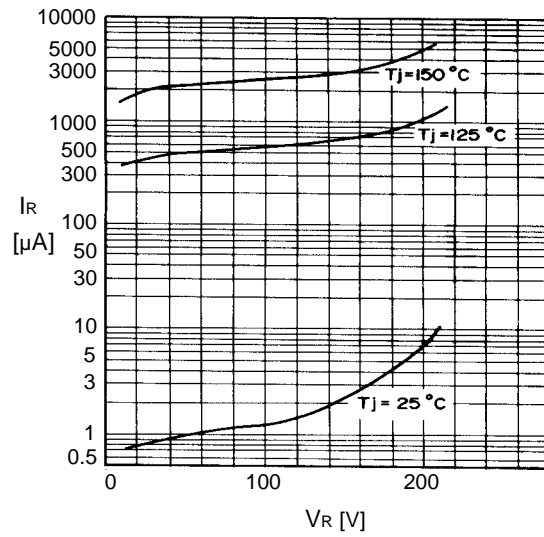


■ Characteristics

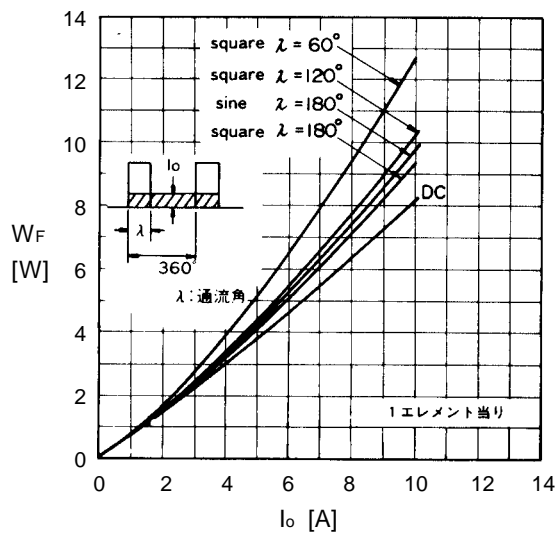
Forward characteristics



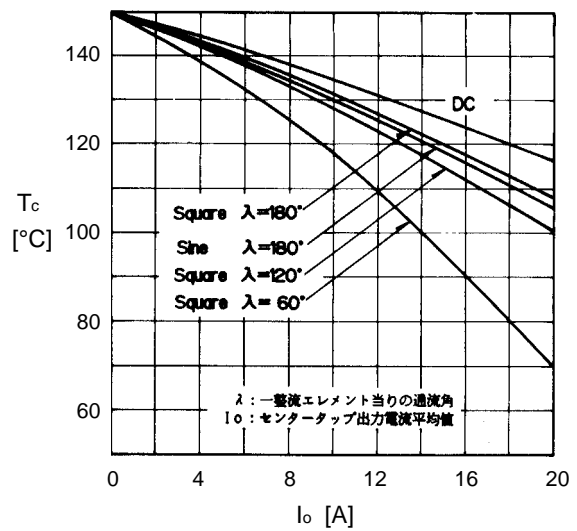
Reverse characteristics



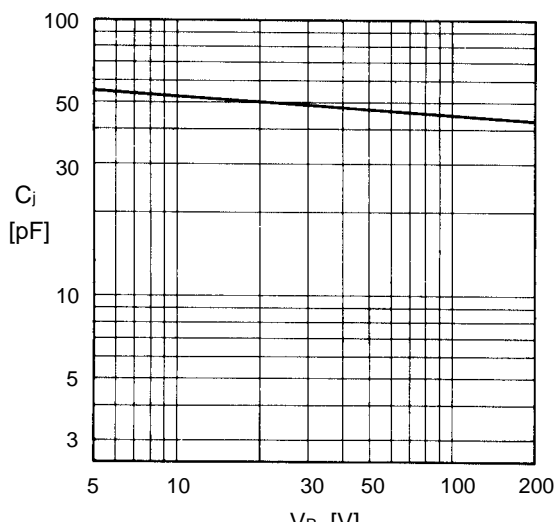
Forward power dissipation



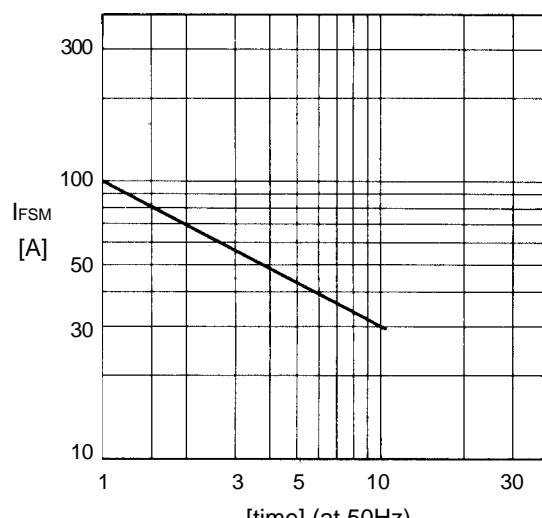
Output current-case temperature



Junction capacitance characteristics



Surge capability



Transient thermal impedance

