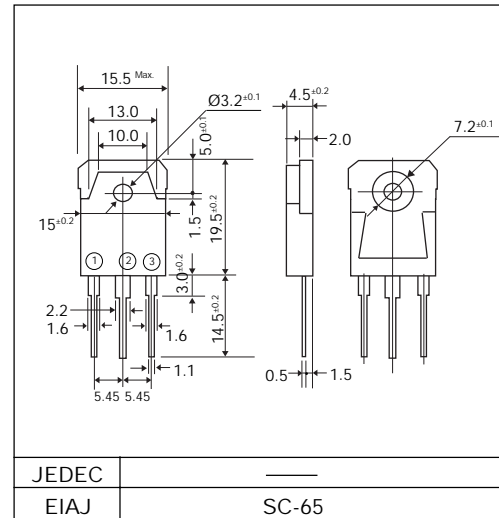


ESAD33(C,N,D) (15A)

(200V / 15A)

FAST RECOVERY DIODE

Outline drawings, mm



Features

- High voltage by mesa design
- High reliability

Applications

- High speed power switching

Maximum ratings and characteristics

- Absolute maximum ratings

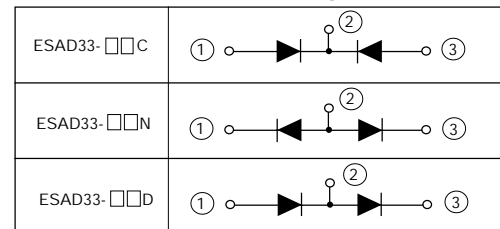
Item	Symbol	Conditions	Rating	Unit
			-02	
Repetitive peak reverse voltage	V_{RRM}		200	V
Non-repetitive peak reverse voltage	V_{RSM}		220	V
Average output current	I_o	Square wave, duty=1/2, $T_c=88^\circ\text{C}$	15*	A
Surge current	I_{FSM}	Sine wave 10ms	80	A
Operating junction temperature	T_j		-40 to +150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

* Average forward current of centertap full wave connection

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

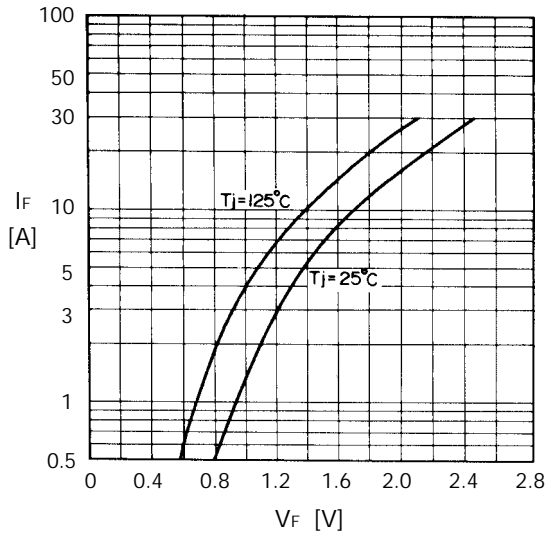
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=5.0\text{A}$	1.5	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	1.0	mA
Reverse recovery time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.1\text{A}$	100	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.0	$^\circ\text{C/W}$

Connection diagram

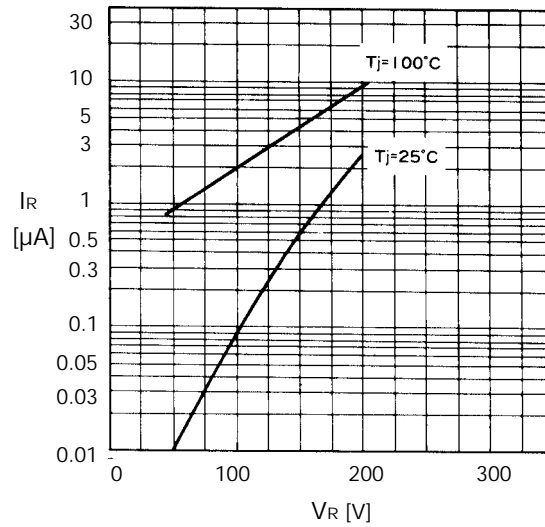


Characteristics

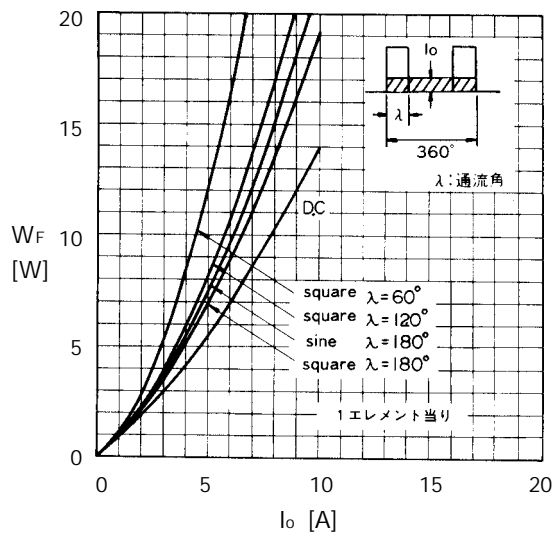
Forward characteristics



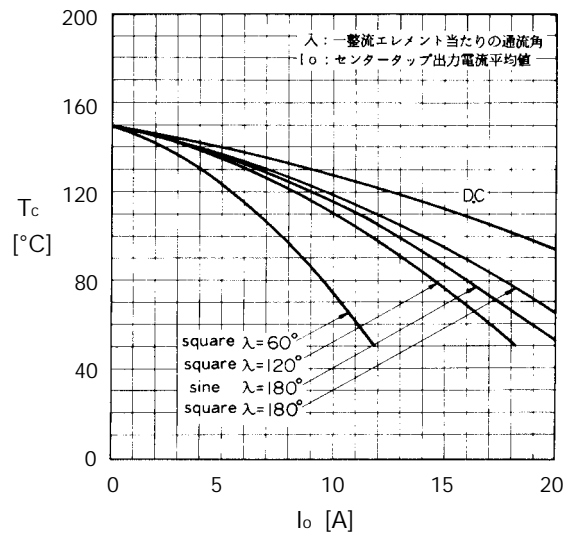
Reverse characteristics



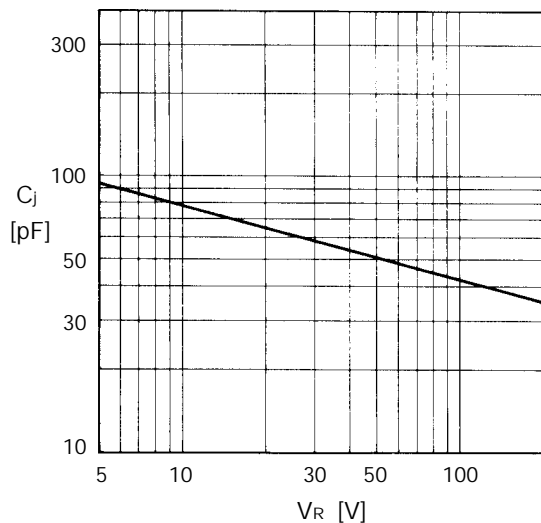
Forward power dissipation



Output current-case temperature



Junction capacitance characteristics



Surge capability

