

ESAC25(C,N,D) (10A)

(200V to 400V / 10A)

FAST RECOVERY DIODE

Features

- High voltage by mesa design
- High reliability

Applications

- High speed switching

Maximum ratings and characteristics

- Absolute maximum ratings

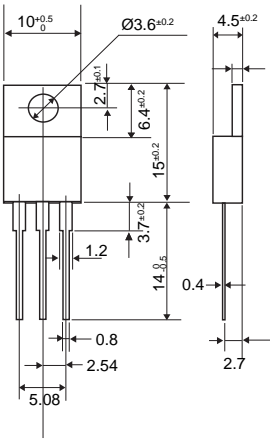
Item	Symbol	Conditions	Rating		Unit
			-02	-04	
Repetitive peak reverse voltage	V_{RRM}		200	400	V
Non-repetitive peak reverse voltage	V_{RSM}		250	450	V
Average output current	I_o	Square wave, duty=1/2, $T_c=106^{\circ}\text{C}$	10*		A
Surge current	I_{FSM}	Sine wave 10ms	70		A
Operating junction temperature	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

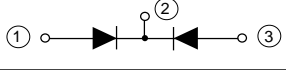
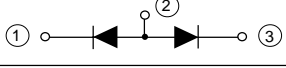
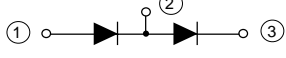
- Electrical characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=2.5\text{A}$	1.3	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	50	μA
Reverse recovery time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.1\text{A}$	0.4	μs
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.0*	$^{\circ}\text{C/W}$

Outline drawings, mm

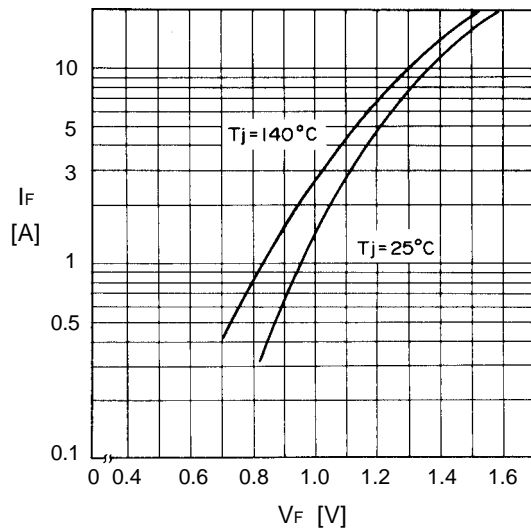
	JEDEC	TO-220AB
	EIAJ	SC-46

Connection diagram

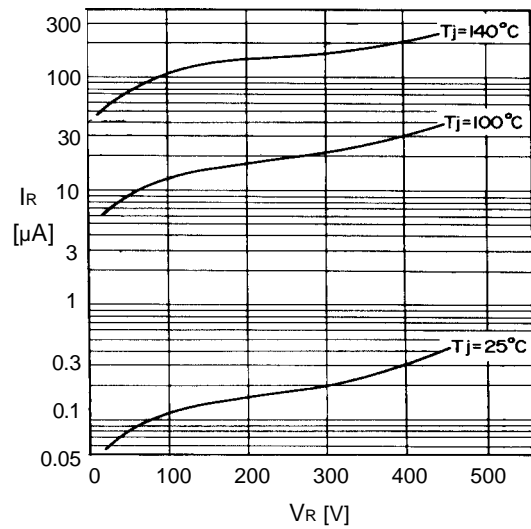
ESAC25-□□C	
ESAC25-□□N	
ESAC25-□□D	

■ Characteristics

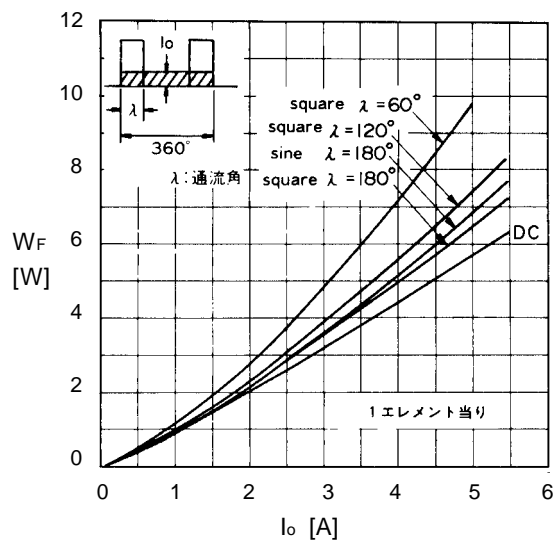
Forward characteristics



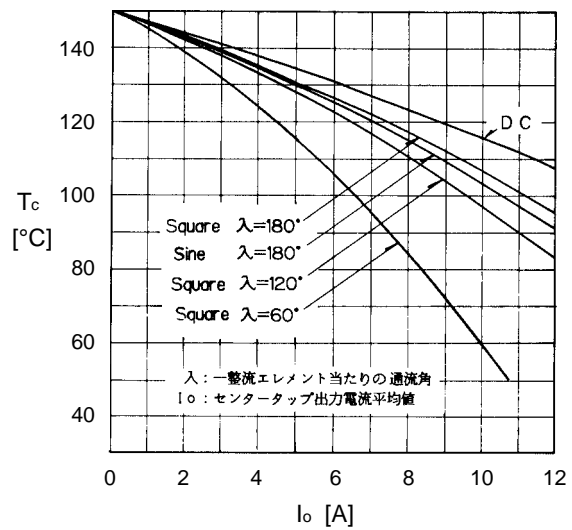
Reverse characteristics



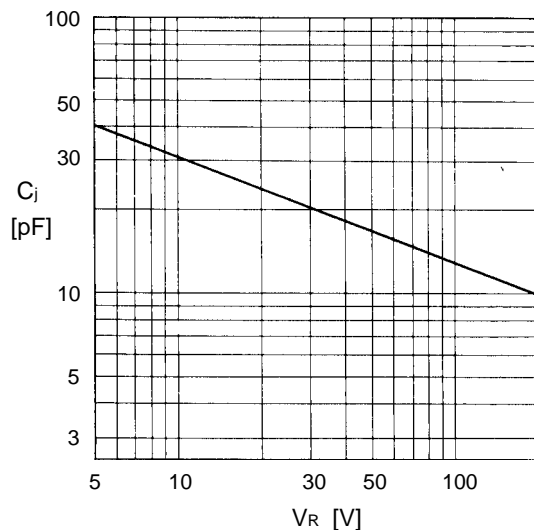
Forward power dissipation



Output current-case temperature



Junction capacitance characteristics



Surge capability

