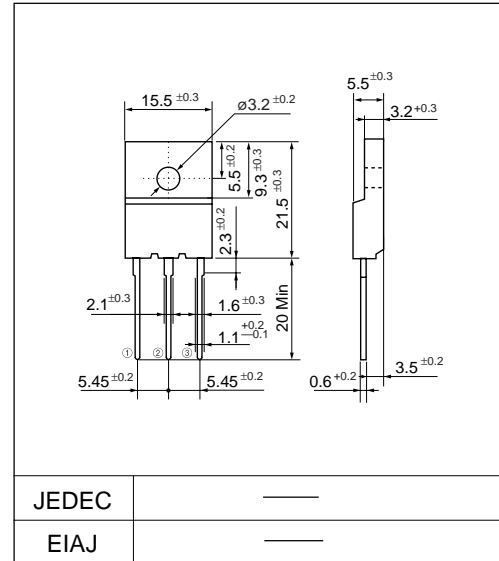


ESAC87M-009 (16A)

(90V / 16A)

SCHOTTKY BARRIER DIODE

Outline drawings, mm



Features

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

Applications

- High speed power switching

Maximum ratings and characteristics

- Absolute maximum ratings

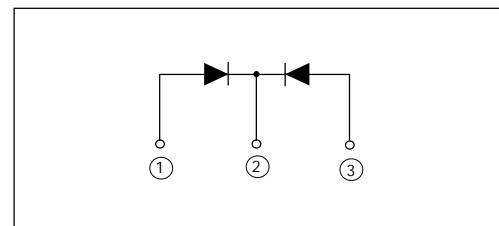
Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		90	V
Non-repetitive peak reverse voltage	V_{RSM}	$t_w=500\text{ns}$, $\text{duty}=1/40$	100	V
Isolating voltage	V_{iso}	Terminals-to-case, AC. 1min.	1500	V
Average output current	I_o	Square wave, $\text{duty}=1/2$ $T_c=90^\circ\text{C}$	16*	A
Surge current	I_{FSM}	Sine wave 10ms	100	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)

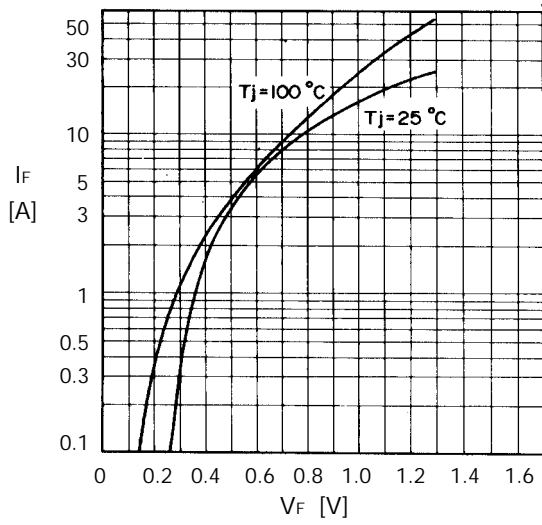
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=6\text{A}$	0.9	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	10	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.0	$^\circ\text{C}/\text{W}$

Connection diagram

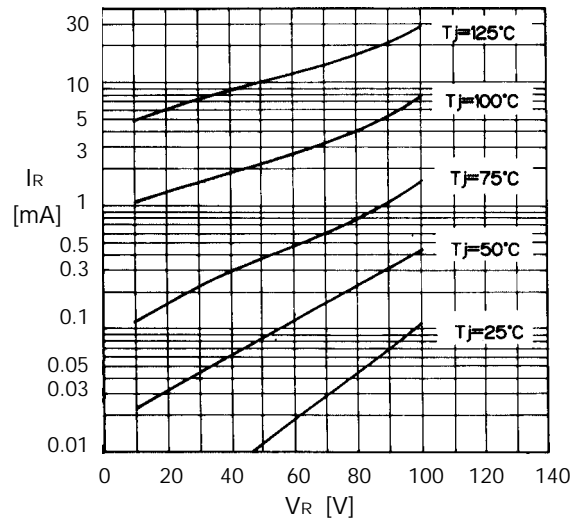


■ Characteristics

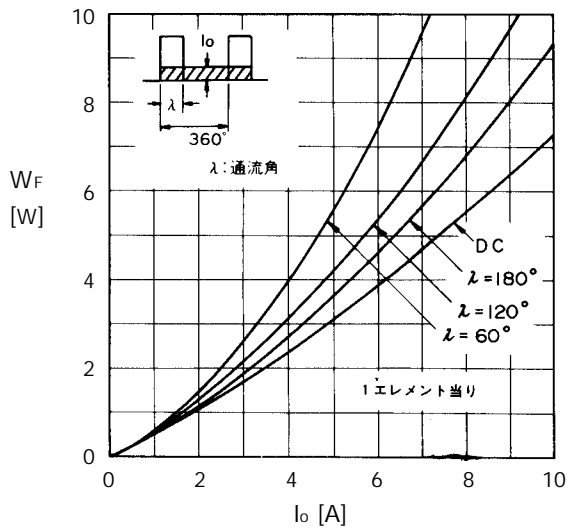
Forward characteristics



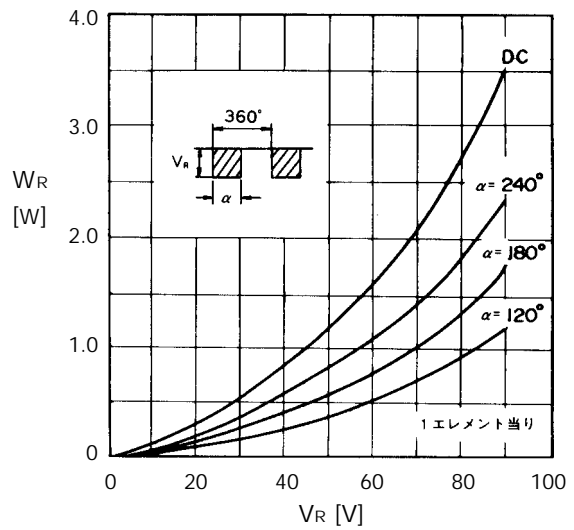
Reverse characteristics



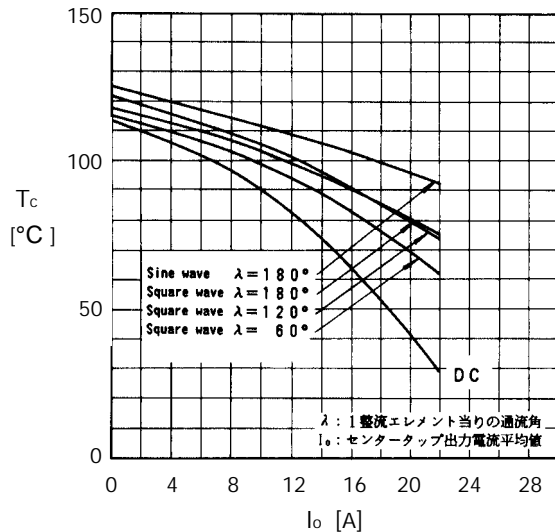
Forward power dissipation



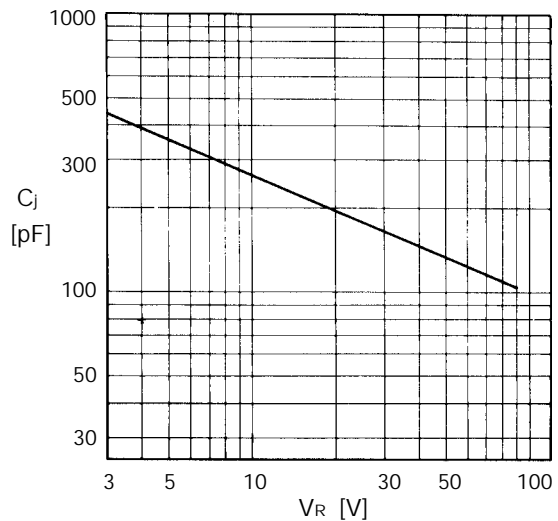
Reverse power dissipation



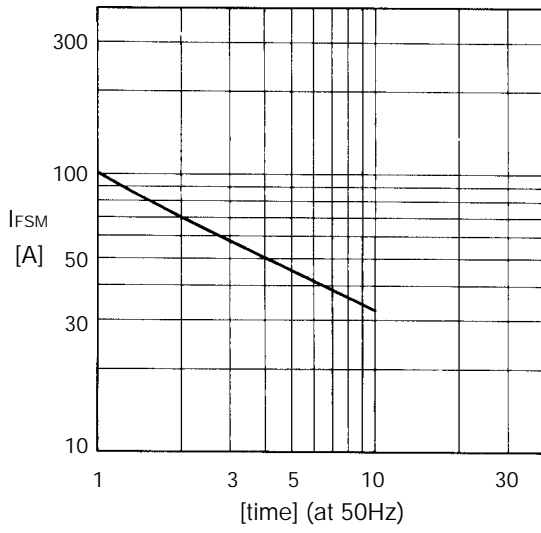
Output current-case temperature



Junction capacitance characteristics



Surge capability



Transient thermal impedance

