

# ESAC87M-009 (16A) (90V / 16A)

## SCHOTTKY BARRIER DIODE

### 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

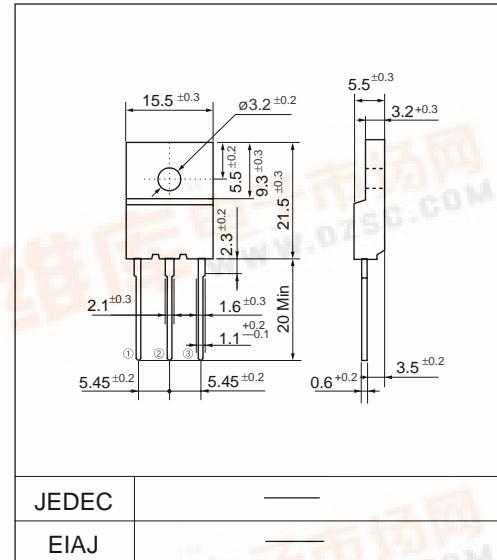
Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$		90	V
Non-repetitive peak reverse voltage	$V_{RSM}$	$t_w=500\text{ns}$ , duty=1/40	100	V
Isolating voltage	$V_{iso}$	Terminals-to-case, AC. 1min.	1500	V
Average output current	$I_o$	Square wave, duty=1/2 $T_c=90^\circ\text{C}$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

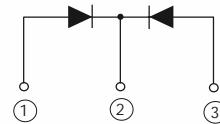
- Electrical characteristics ( $T_a=25^\circ\text{C}$  Unless otherwise specified )

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

### Outline drawings, mm

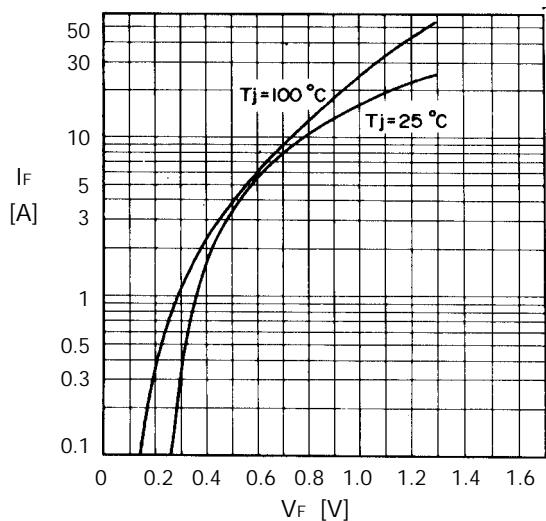


### Connection diagram

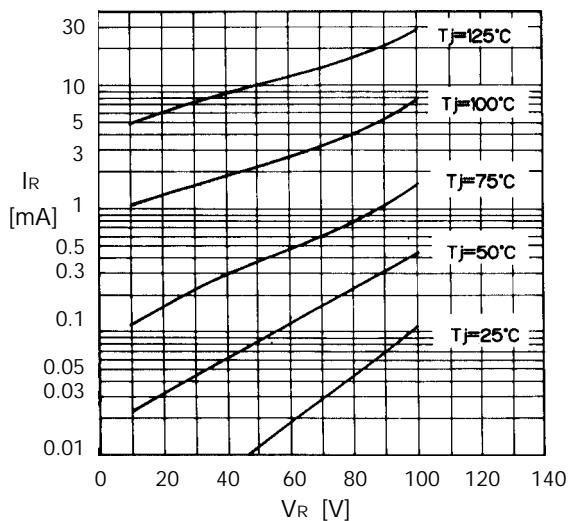


## ■ Characteristics

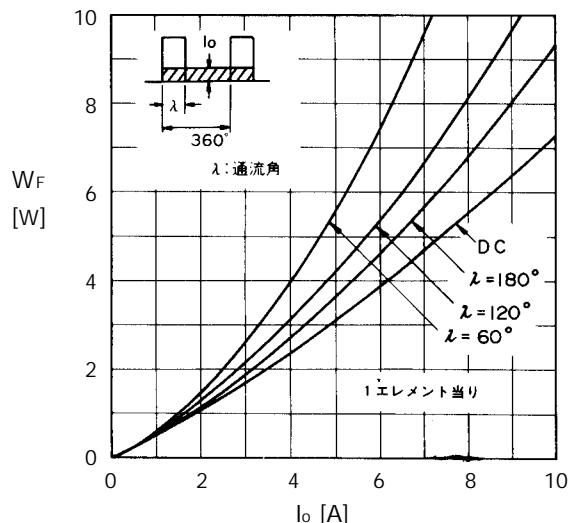
Forward characteristics



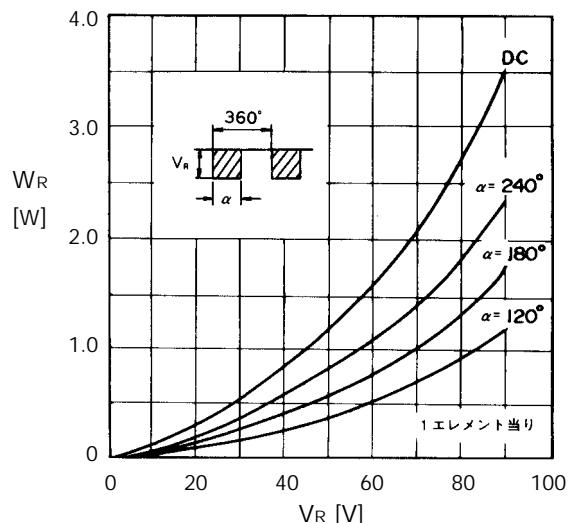
Reverse characteristics



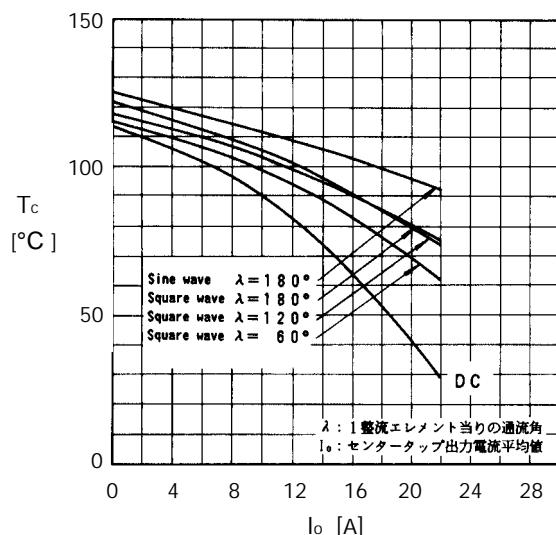
Forward power dissipation



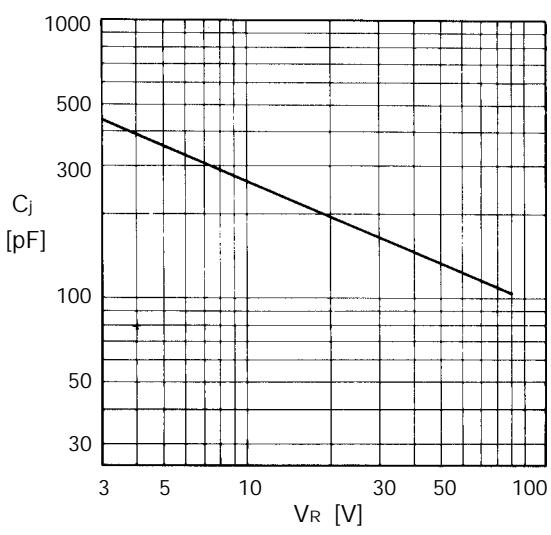
Reverse power dissipation



Output current-case temperature



Junction capacitance characteristics



**(90V / 16A )**

**ESAC87M-009 (16A)**

