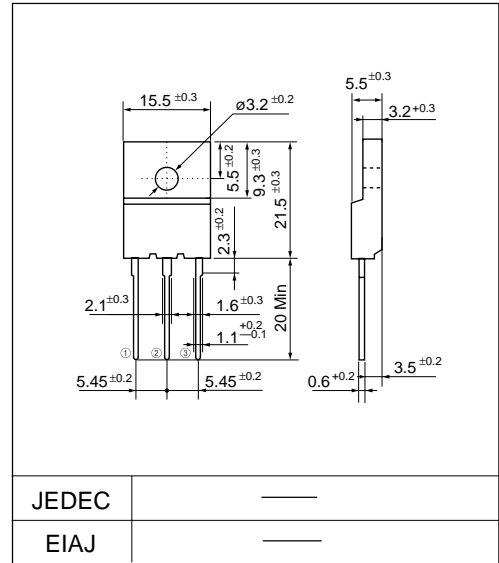


# ESAC87M-009R (16A) (90V / 16A)

## 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	$V_{RSM}$	$t_w=500\text{ns}$ , 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 $T_c=115^\circ\text{C}$	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	$^\circ\text{C}$

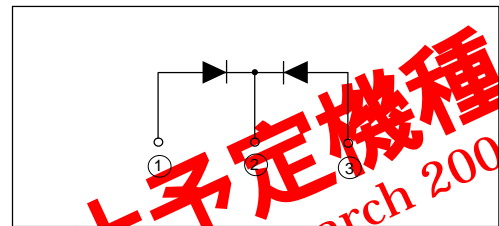
\* Average forward current of centertap full wave connection

- 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	$^\circ\text{C/W}$

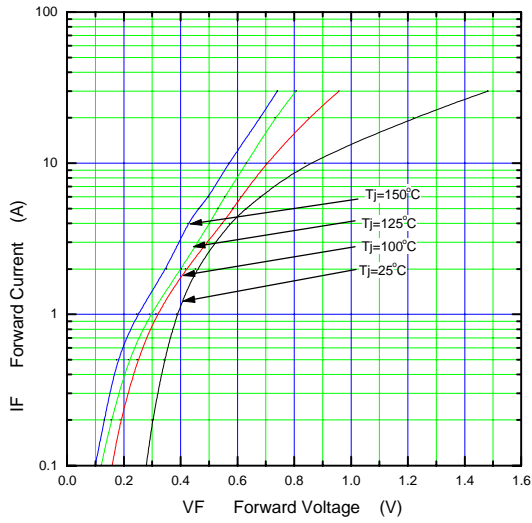
2007年3月 保守廃止予定機種  
 This product is scheduled to be obsolete on march 2007.  
 Not recommend for new design.

### Connection diagram

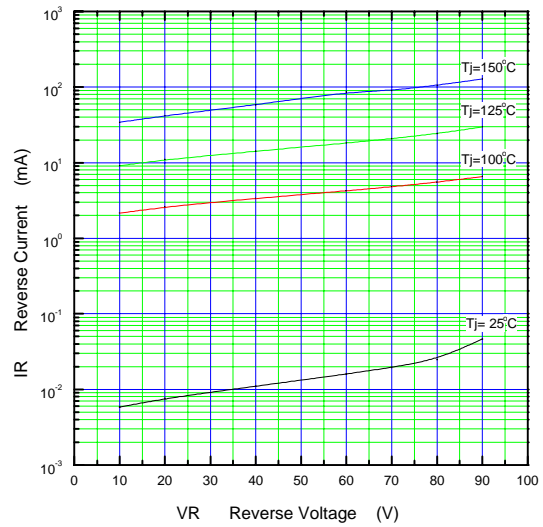


Characteristics

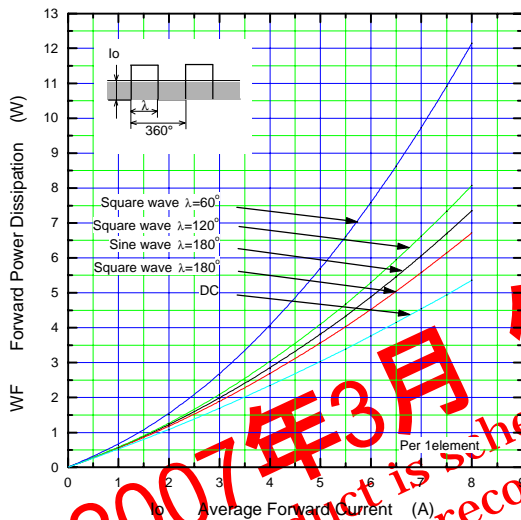
Forward Characteristic (typ.)



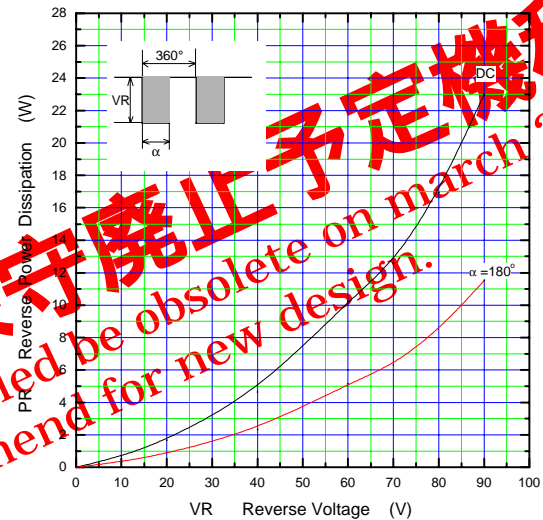
Reverse Characteristic (typ.)



Forward Power Dissipation

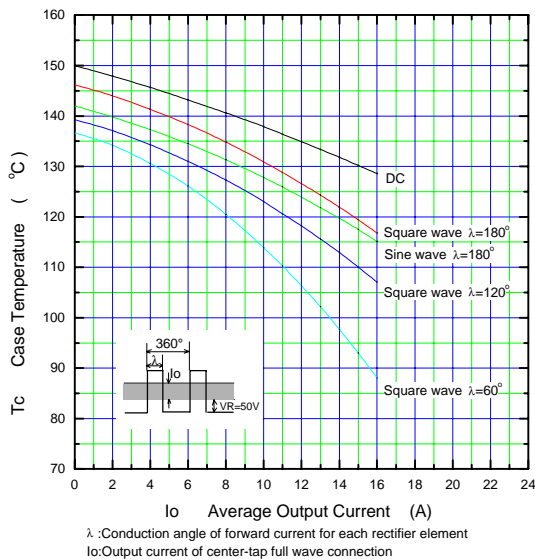


Reverse Power Dissipation

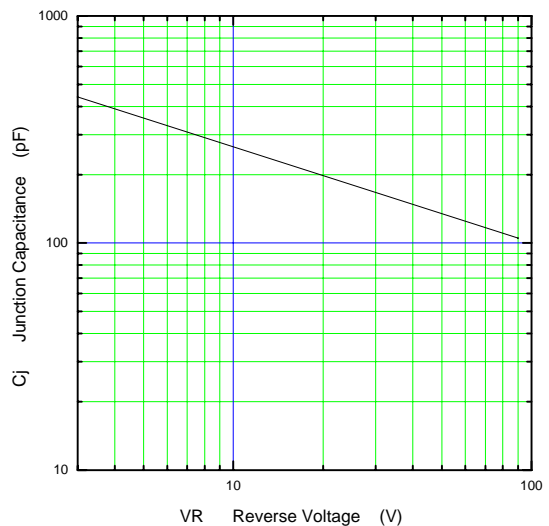


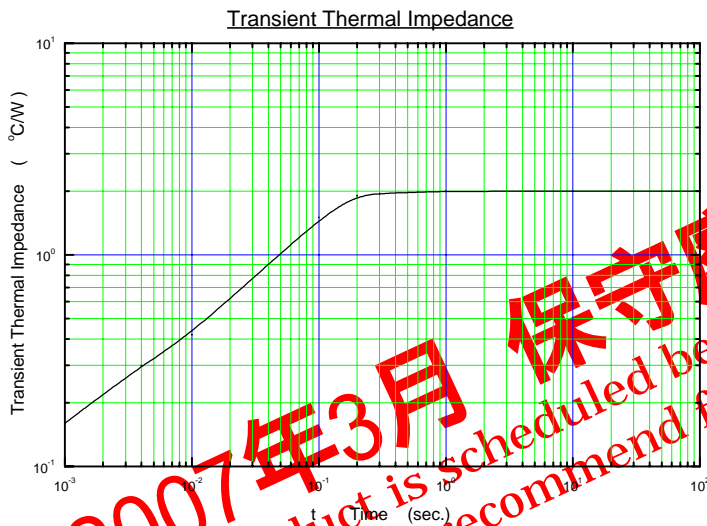
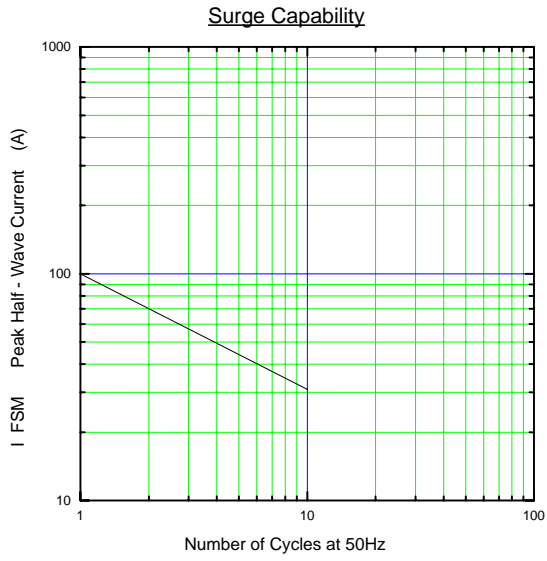
2007年3月 保守廃止予定機種  
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Current Derating (Io-Tc)



Junction Capacitance Characteristic (typ.)





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