

ESAC83M-004 (20A)

(40V / 20A)

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

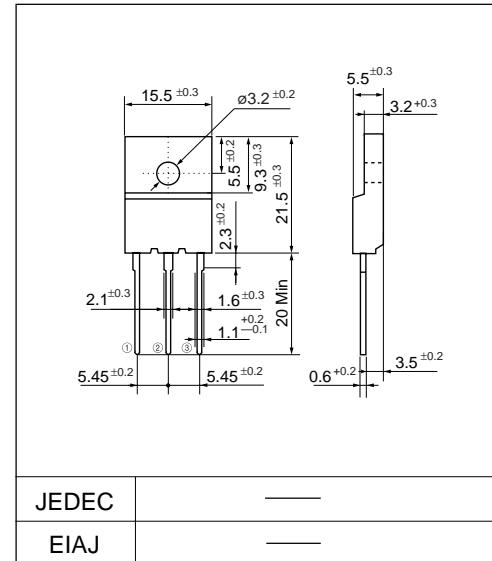
Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V _{RRM}		40	V
Non-repetitive peak reverse voltage	V _{RSM}	t _w =500ns, duty=1/40	48	V
Average output current	I _o	Square wave, duty=1/2 T _c =79°C	20*	A
Surge current	I _{FSM}	Sine wave 10ms	120	A
Operating junction temperature	T _j		-40 to +150	°C
Storage temperature	T _{stg}		-40 to +150	°C

* Average forward current of centertap full wave connection

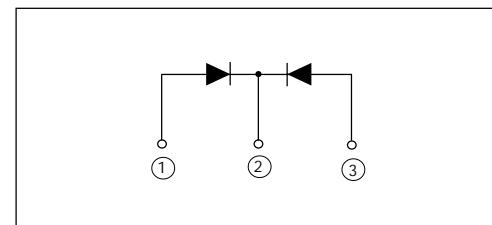
- Electrical characteristics (Ta=25°C Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V _{FM}	I _{FM} =8A	0.55	V
Reverse current	I _{RRM}	V _R =V _{RRM}	15	mA
Thermal resistance	R _{th(j-c)}	Junction to case	2.5	°C/W

■ Outline drawings, mm

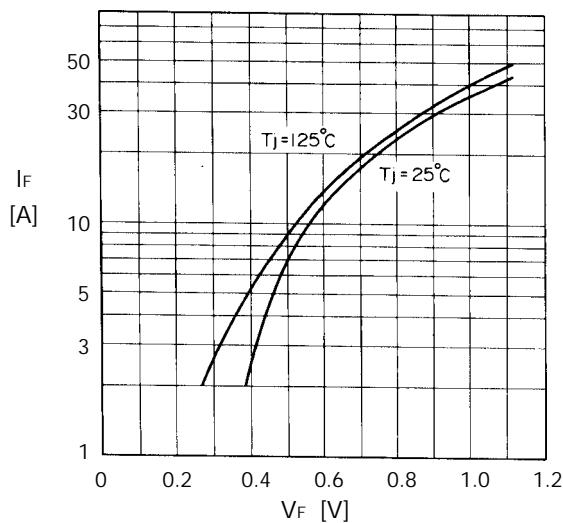


■ Connection diagram

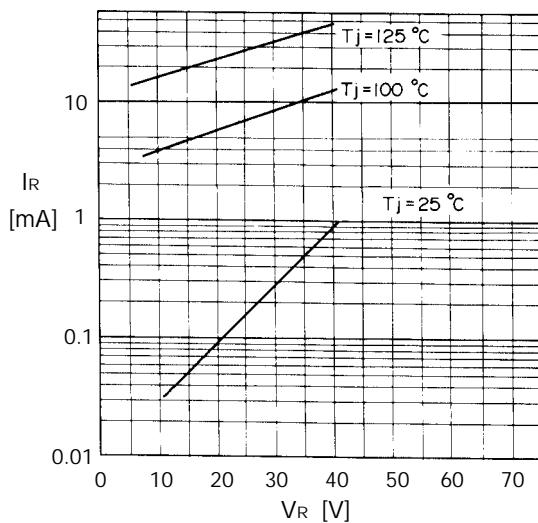


■ Characteristics

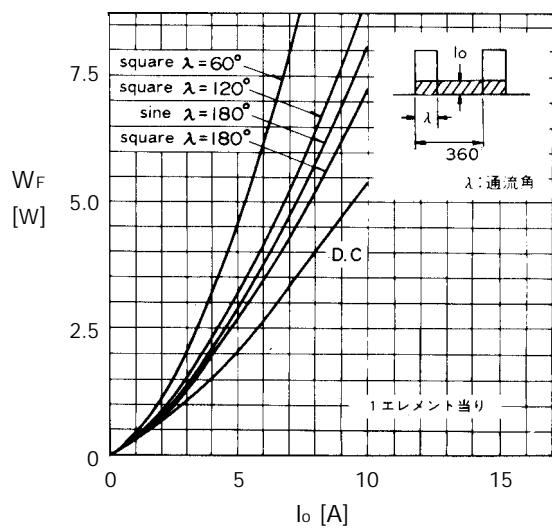
Forward characteristics



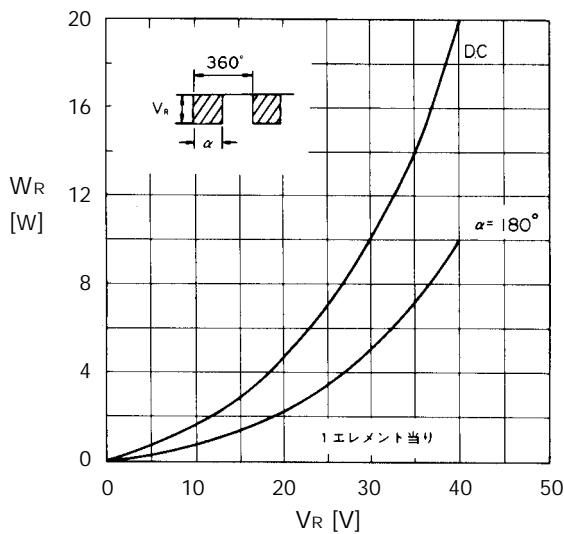
Reverse characteristics



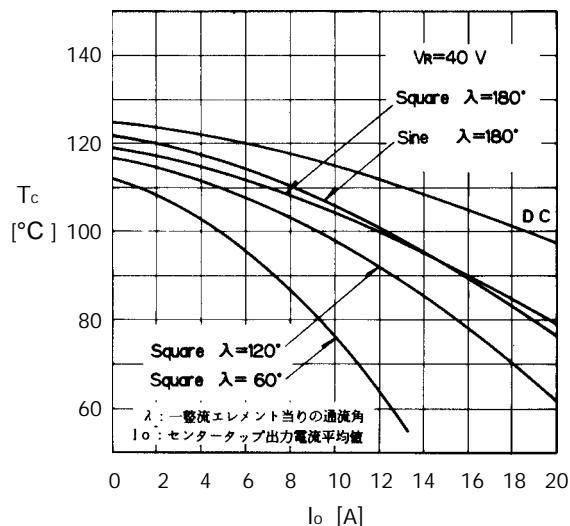
Forward power dissipation



Reverse power dissipation



Output current-case temperature



Junction capacitance characteristics

