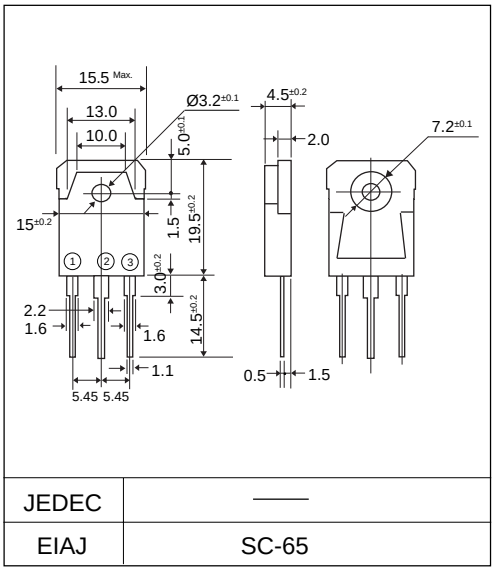
ESAC61-004 (12A) (40V / 12A)

SCHOTTKY BARRIER DIODE

Outline drawings, mm

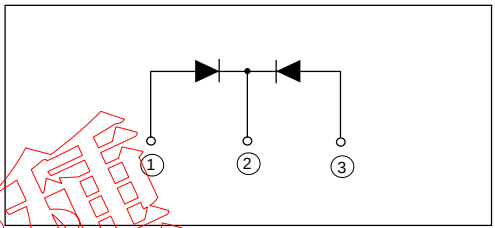


JEDEC	———
EIAJ	SC-65

Features

- Low V_F
- Super high speed switching
- High reliability by planer design

Connection diagram



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}	tw=500ns, duty=1/40	48	V
Average output current	Io	Square wave, duty=1/2 Tc=100°C	12*	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

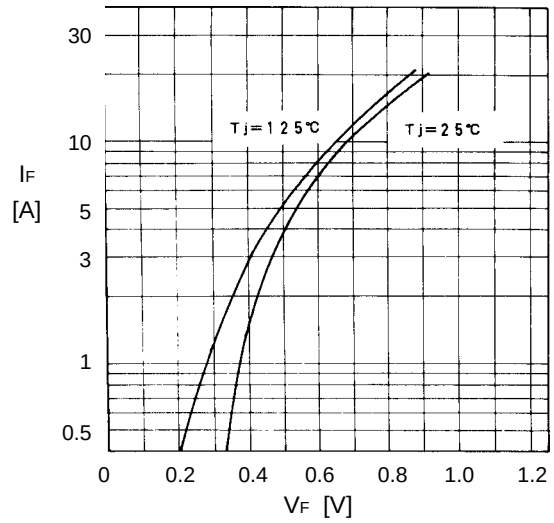
* Average forward current of centertap full wave connection

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

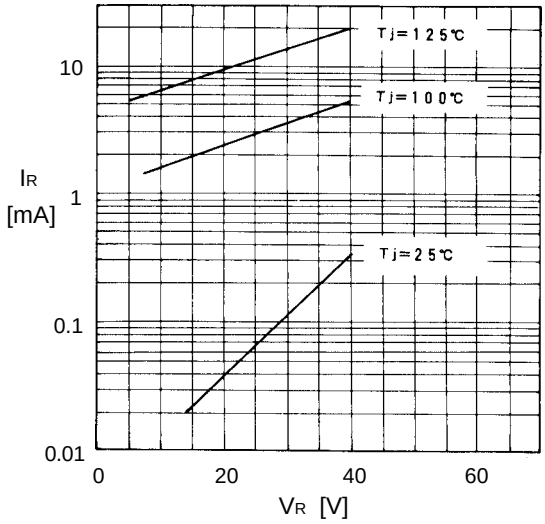
Item	Symbol	**Conditions**	**Max.**	Unit
Forward voltage drop	V_{FM}	I_{FM}=6A	0.6	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	5.0	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.0	°C/W

■ Characteristics

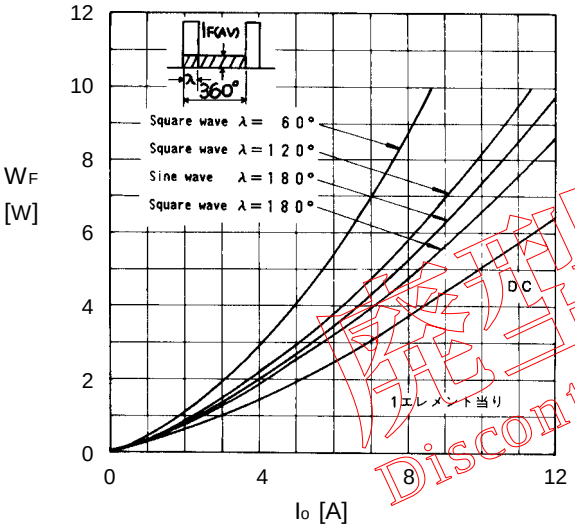
Forward characteristics



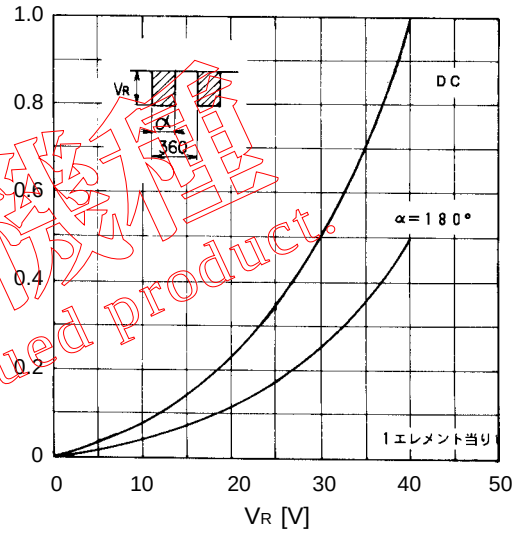
Reverse characteristics



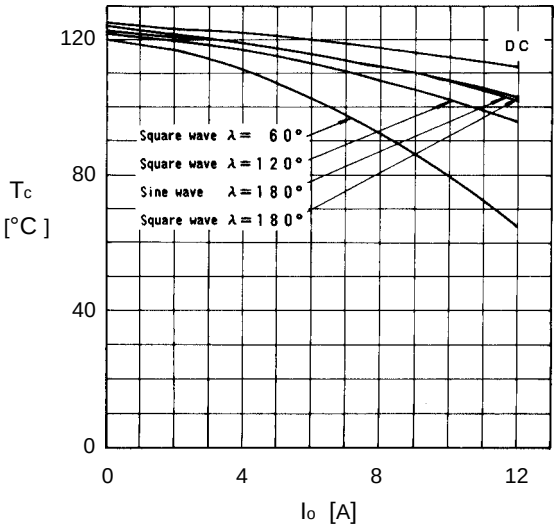
Forward power dissipation



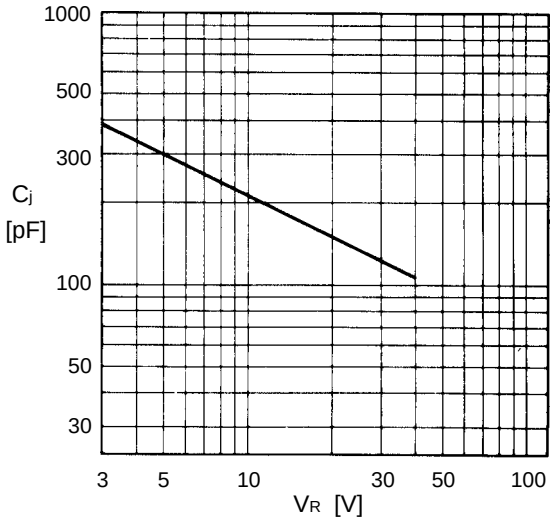
Reverse power dissipation



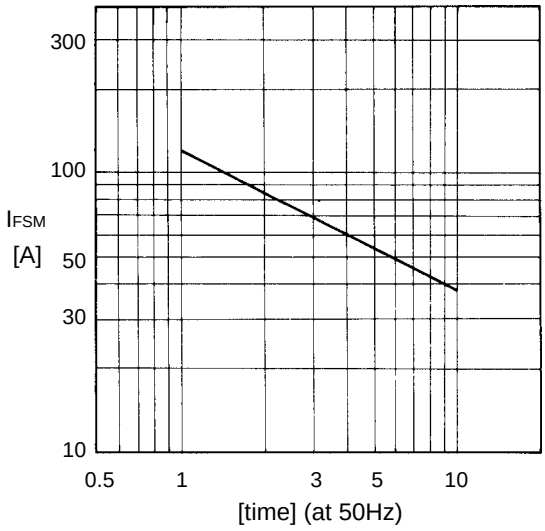
Average output current-case temperature



Junction capacitance characteristics



Surge capability



Transient thermal impedance