

ERD80-004 (15A)

(40V / 15A)

SCHOTTKY BARRIER DIODE

■ Features

- *Low VF*
- *Super high speed switching*
- *High reliability by planer design*

■ Applications

- *High speed power switching*

■ *Maximum ratings and characteristics*

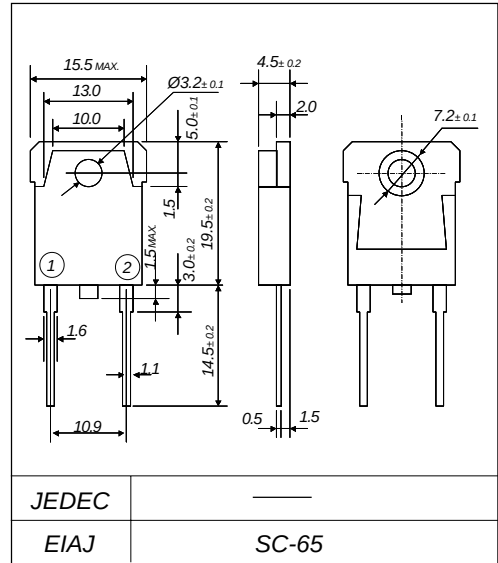
- *Absolute maximum ratings*

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		40	V
Non-repetitive peak reverse voltage	V_{RSM}	$tw=500ns, duty=1/40$	48	V
Average output current	I_o	Square wave, $duty=1/2$ $T_c=100^{\circ}C$	15	A
Surge current	I_{FSM}	Sine wave 10ms	250	A
Operating junction temperature	T_j		-40 to +150	$^{\circ}C$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}C$

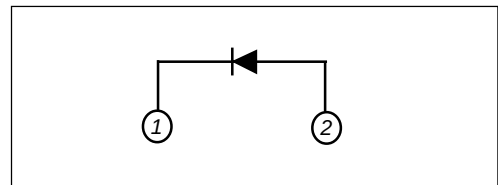
- *Electrical characteristics (Ta=25°C Unless otherwise specified)*

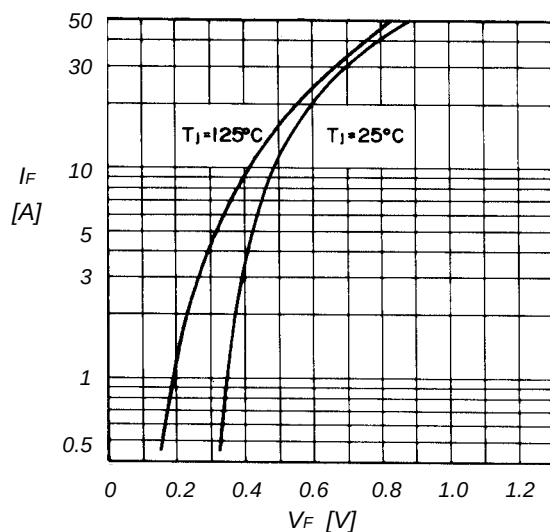
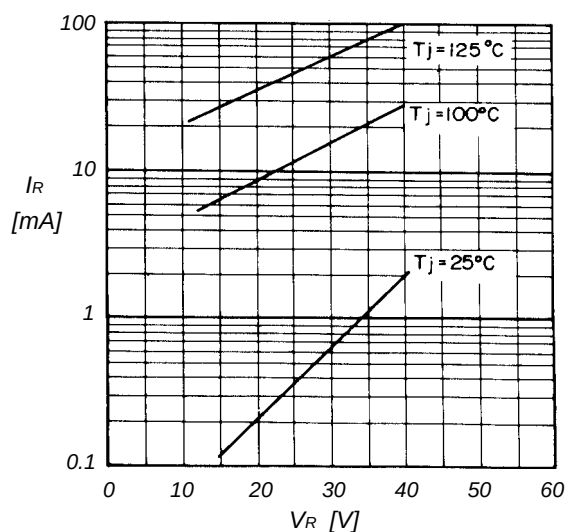
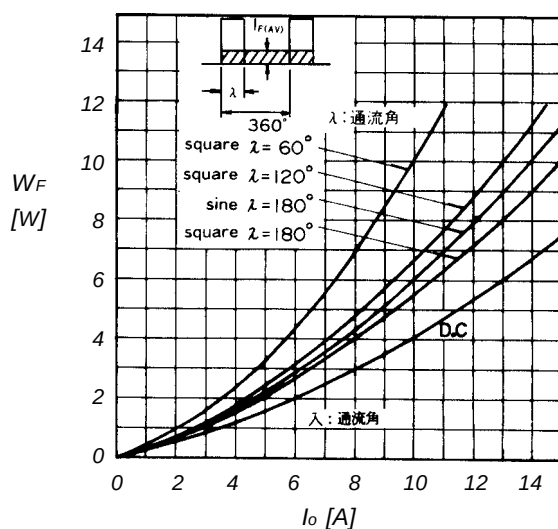
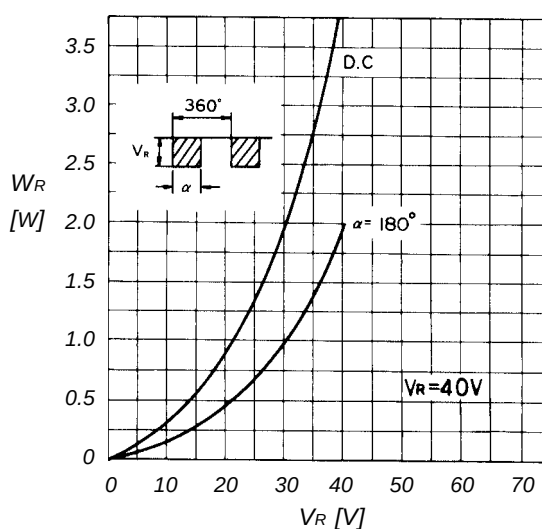
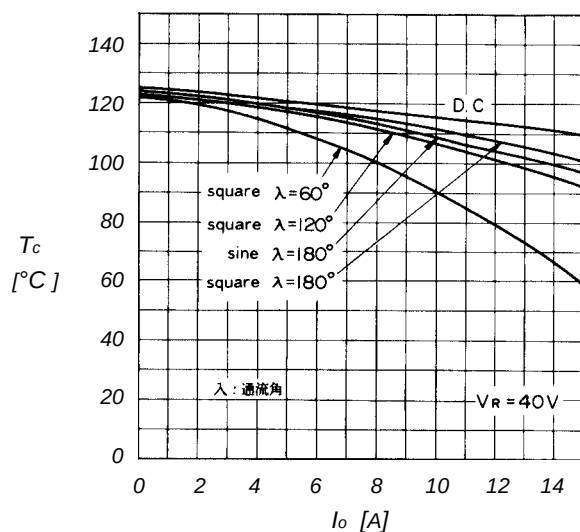
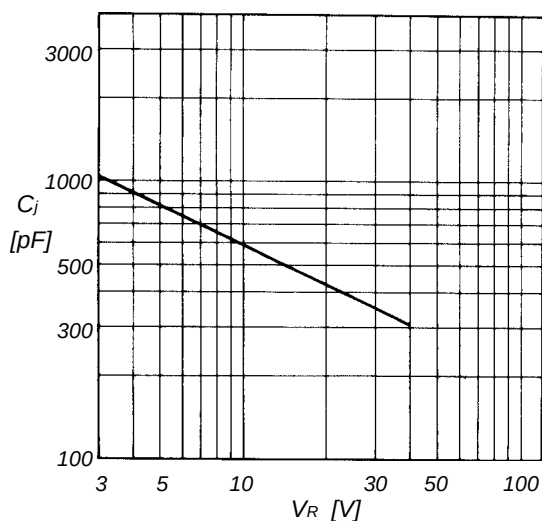
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=12.5A$	0.55	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	10	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.0	°C/W

■ *Outline drawings, mm*

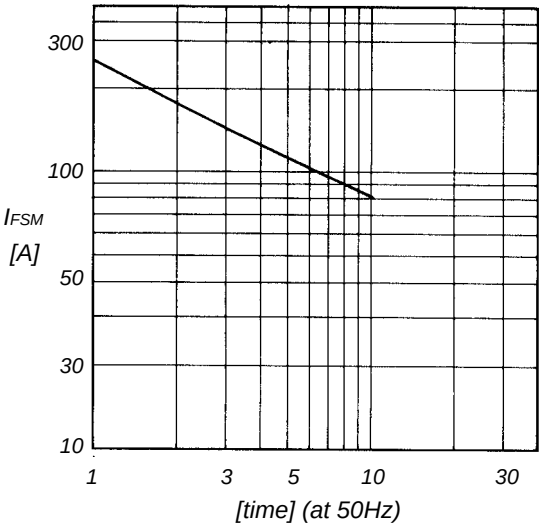


■ *Connection diagram*



■ Characteristics*Forward characteristics**Reverse characteristics**Forward power dissipation**Reverse power dissipation**Average output current-case temperature**Junction capacitance characteristics*

Surge capability



Transient thermal impedance

