

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
Repetitive peak surge reverse voltage	V_{RSM}	$t_w=500\text{ns}$, duty=1/40	48	V
Isolating voltage	V_{iso}	Terminals to Case, AC. 1min.	1500	V
Average output current	I_o	duty=1/2, $T_c=100^\circ\text{C}$ Square wave	20*	A
Surge current	I_{FSM}	Sine wave 10ms	120	A
Operating junction temperature	T_j		-40 to +150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

* Out put current of center tap full wave connection.

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

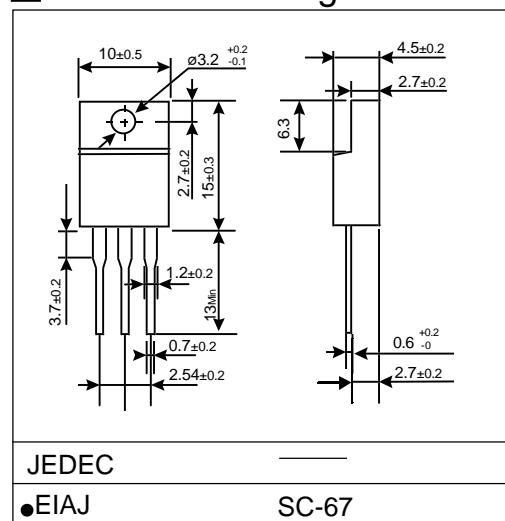
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	V_F	$I_F=10\text{A}$	0.6	V
Reverse current **	I_R	$V_R=V_{RRM}$	15	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.5	$^\circ\text{C}/\text{W}$

** Rating per element

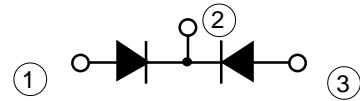
- Mechanical Characteristics

Mounting torque	Recommended torque	0.3 to 0.5	N · m
Weight		2.3	g

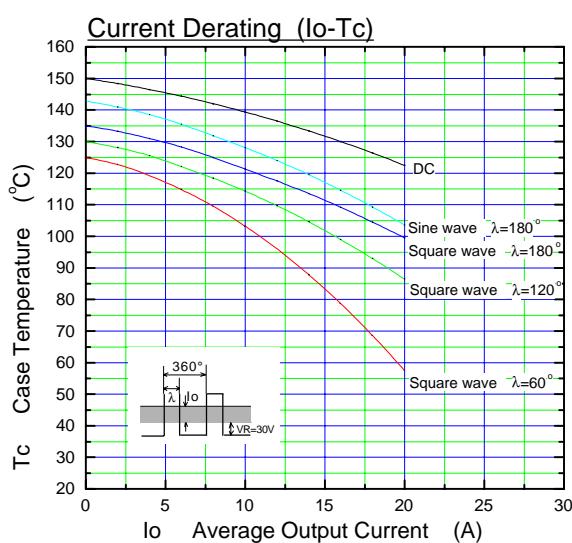
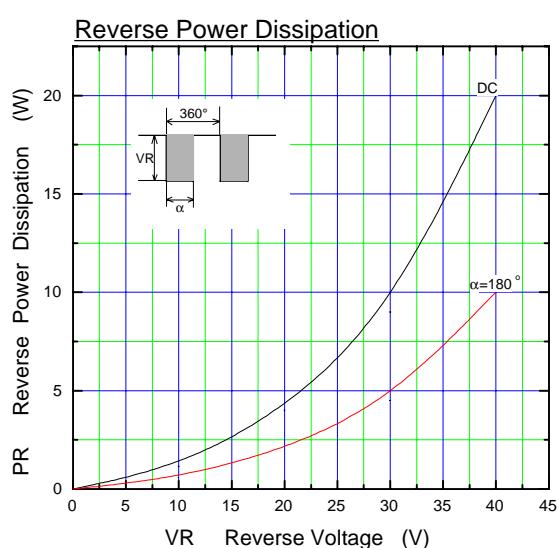
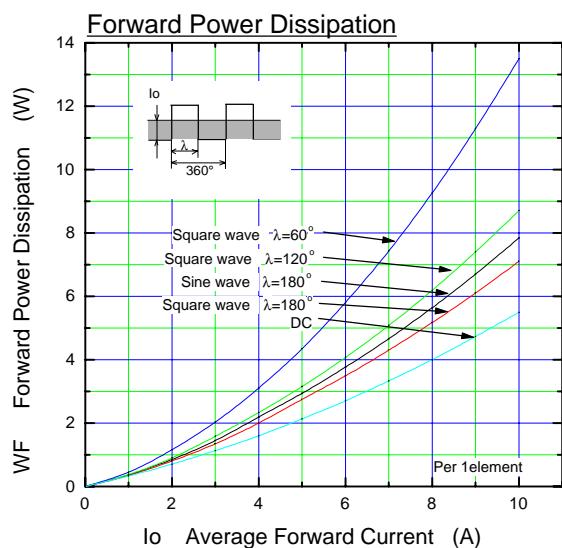
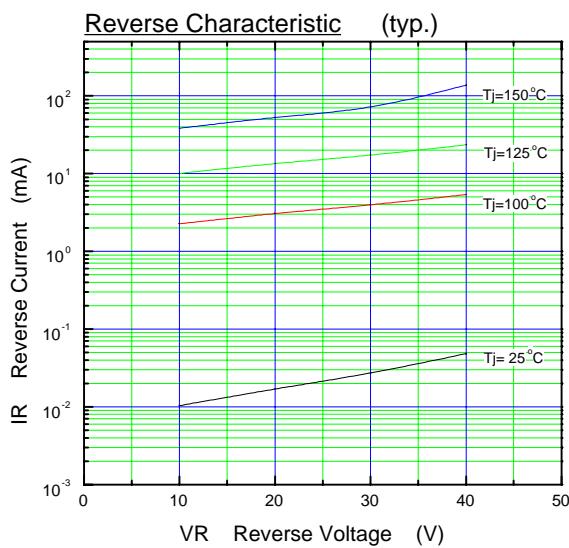
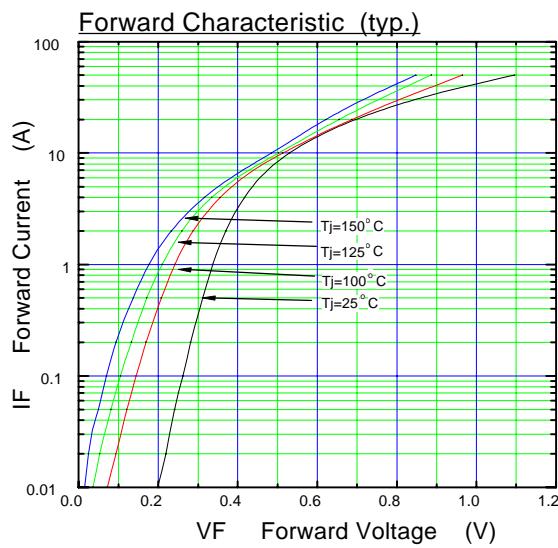
■ Outline Drawings



■ Connection Diagram



■ Characteristics



λ : Conduction angle of forward current for each rectifier element
 Io : Output current of center-tap full wave connection

