

SE014(1A)

COLLMER SEMICONDUCTOR INC 48E D ■ 2238792 0001739 275 ■ COL

■ Outline Drawings T-03-13

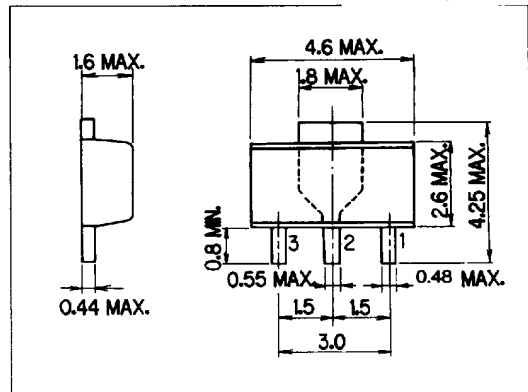
SCHOTTKY BARRIER DIODE

■ Features

- Surface mount device
- Low V_F
- Super high speed switching.
- High reliability by planer design.

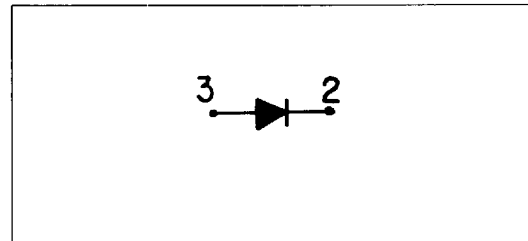
■ Applications

- High speed power switching.



JEDEC	—
EIAJ	SC-62 (SOT89)

■ Connection Diagram



■ Maximum Ratings and Characteristics

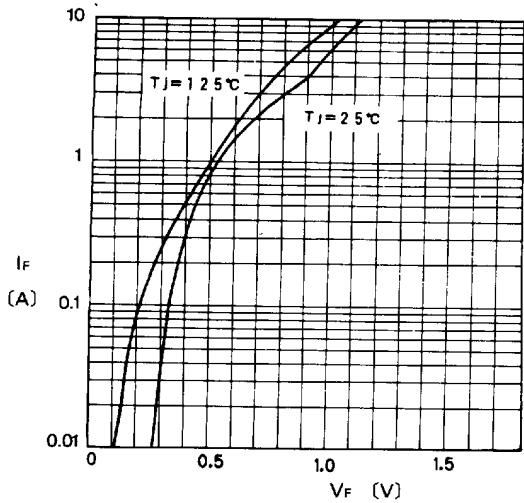
● Absolute Maximum Ratings

Items	Symbols	Conditions	Ratings	Units
Repetitive Peak Reverse Voltage	V_{RRM}		45	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	$t_w = 500\text{ns}$ duty = $\frac{1}{10}$	48	V
Average Output Current	I_o	$T_a = 25^\circ\text{C}$ Resistive Load	1.0*	A
Surge Current	I_{FSM}	10ms Sine wave	10	A
Operating Junction Temperature	T_j		-40 ~ +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-40 ~ +125	$^\circ\text{C}$

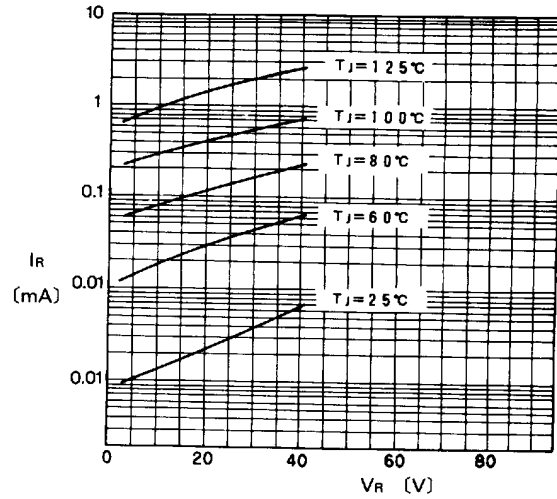
● * Mounted to glass fabric base epoxy resin printed circuits
Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Items	Symbols	Conditions	Max.	Units
Forward Voltage Drop	V_{FM}	$I_{FM} = 1.0\text{A}$	0.55	V
Reverse Current	I_{RRM}	$V_R = V_{RRM}$	2.0	mA
Thermal Resistance	$R_{th(j-a)}$	junction to ambient	110*	$^\circ\text{C/W}$

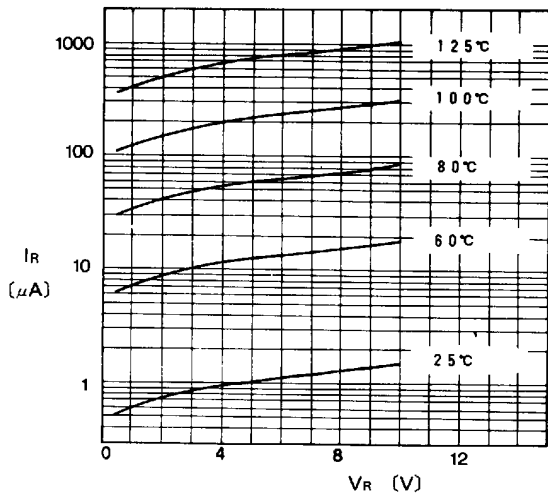
SE014(1A) Characteristics



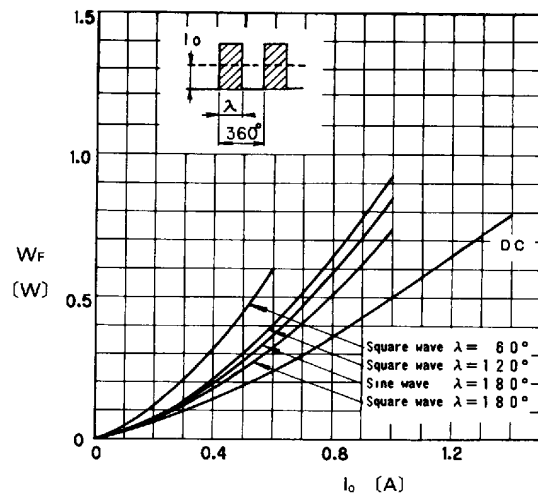
Forward Characteristics



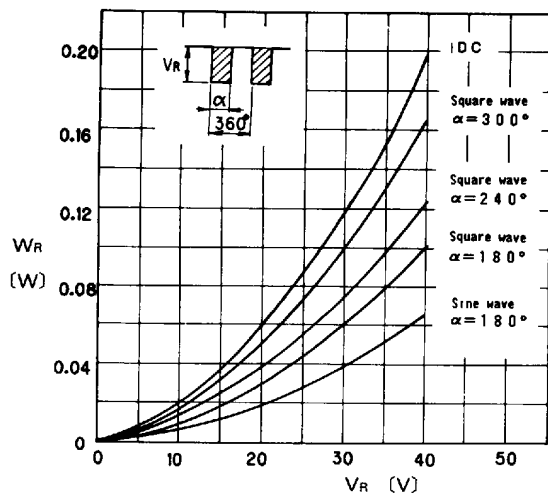
Reverse Characteristics



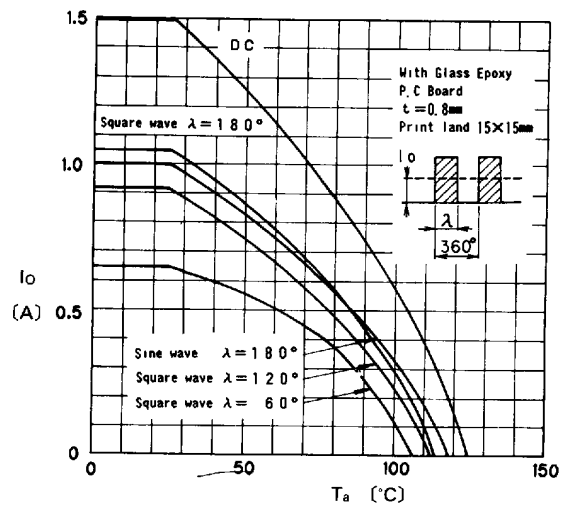
Reverse Characteristics



Forward Power Dissipation



Reverse Power Dissipation



Current Derating (I_o-T_a)

SE014(1A)

