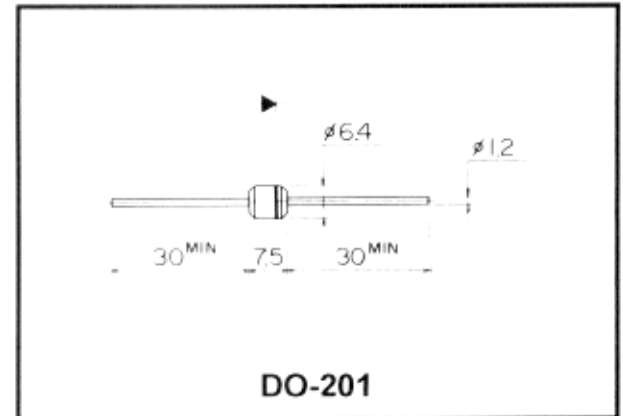


# ERC81S-004 (5A)

## SCHOTTKY BARRIER DIODE

### Outline Drawing



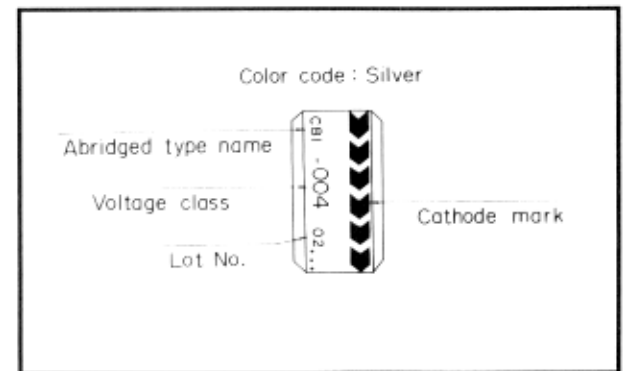
### Features

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

### Applications

- High speed power switching

### Marking



## Maximum Ratings & Characteristics

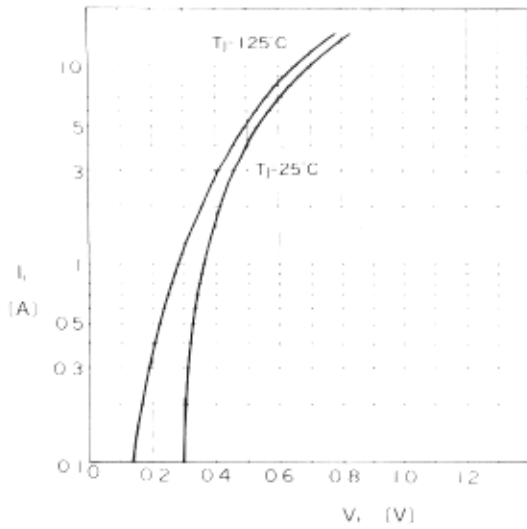
### Absolute Maximum Ratings

Items	Symbols	Conditions	Ratings	Units
Repetitive Peak Reverse Voltage	$V_{RRM}$		45	V
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	$tw = 500ns$ , duty 1/40	48	V
Average Forward Current	$I_{F(AV)}$	$T_a = 25^\circ C$ , duty 1/2, Square wave	5.0	A
Surge Current	$I_{FSM}$	Sine Wave, 10ms	140	A
Operating Junction Temperature	$T_J$		-40 to +150	$^\circ C$
Storage Temperature	$T_{stg}$		-40 to +150	$^\circ C$

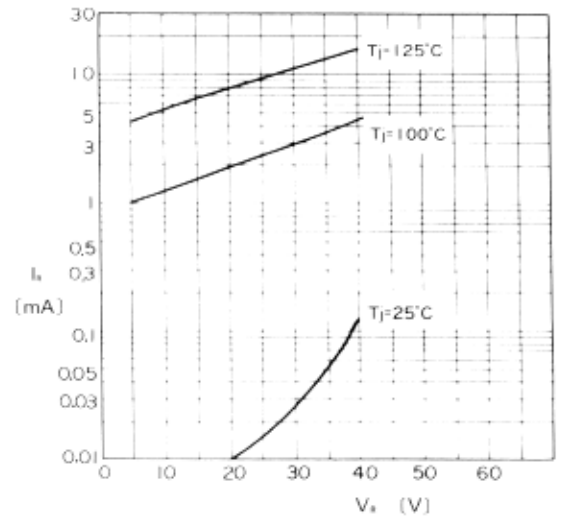
### Electrical Characteristics ( $T_a = 25^\circ C$ Unless otherwise specified)

Items	Symbols	Conditions	Ratings	Units
Forward Voltage Drop	$V_F$	$I_F = 5A$	0.55	V
Reverse Current	$I_R$	$V_R = V_{RRM}$	5.0	mA
Junction Capacitance	$C_J$	$V_R = 5V$	300	pF
Thermal Resistance	$R_{(THJ-L)}$	Junction to lead	12	$^\circ C/W$

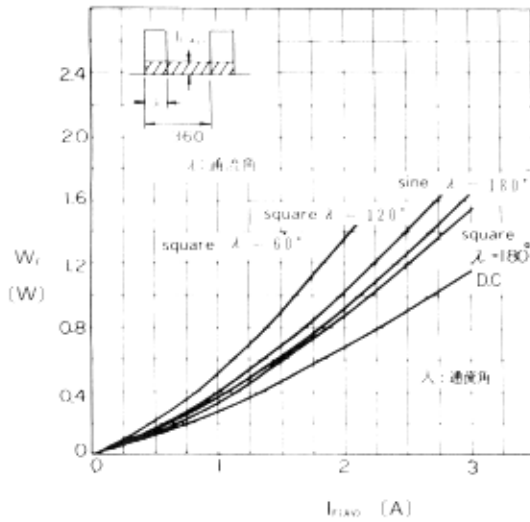
# ERC81S-004 (5A)



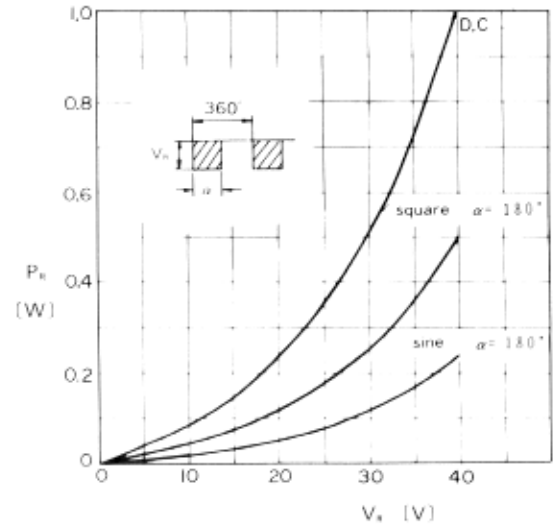
Forward Characteristics



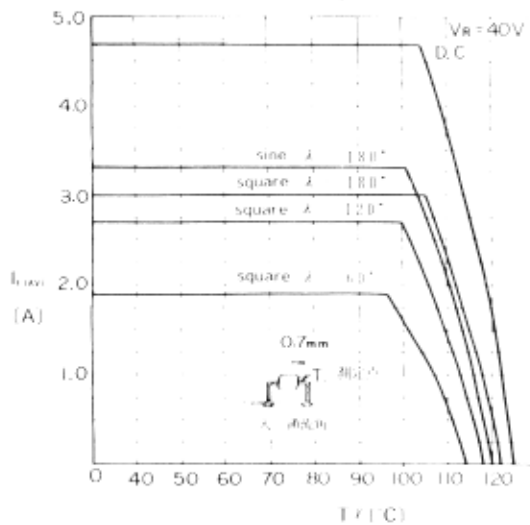
Reverse Characteristics



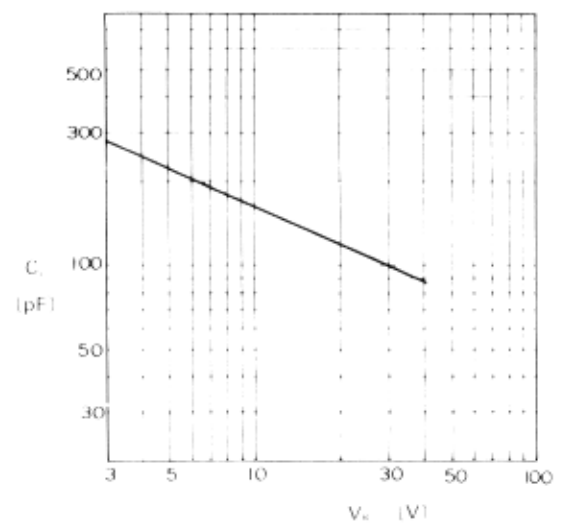
Forward Power Dissipation



Reverse Power Dissipation



$I_{f(av)}$  vs  $T_j$  Characteristics



Junction Capacitance Characteristics