RB751S-40

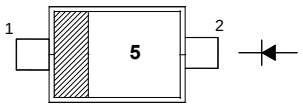
SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

Reverse Voltage - 40V Forward Current - 0.03A

for high speed switching and detection applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**5**"
Simplified outline SOD-523 and symbol

Features

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

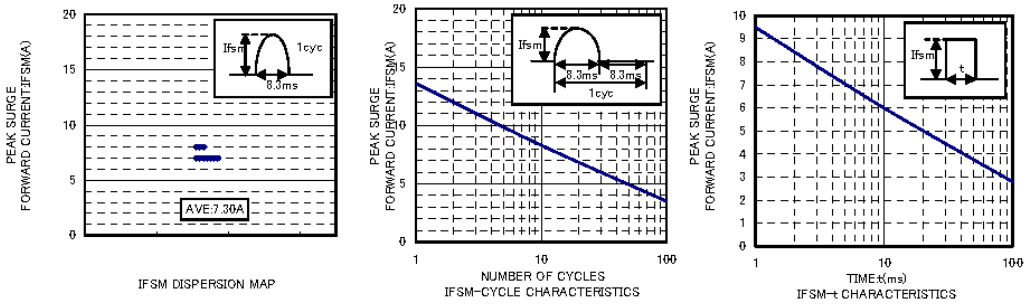
Absolute Maximum Ratings (T_a = 25 °C)

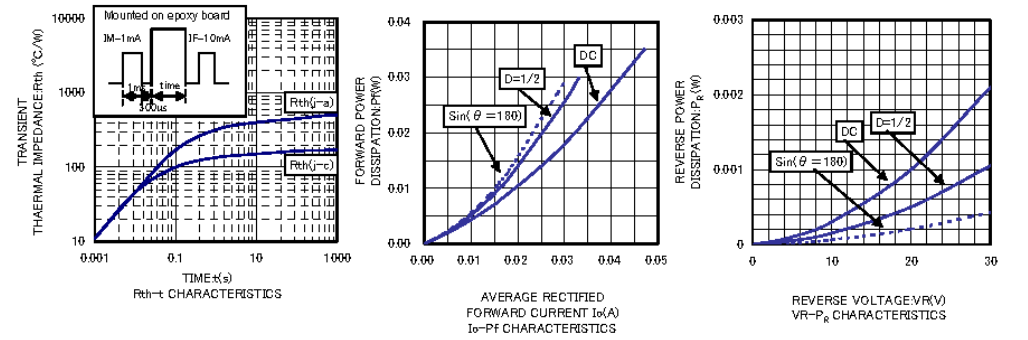
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage	V_R	30	V
Mean Rectifying Current	I_O	30	mA
Peak Forward Surge Current (60 Hz, 1 Cycle)	I_{FSM}	200	mA
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 40 to + 125	°C

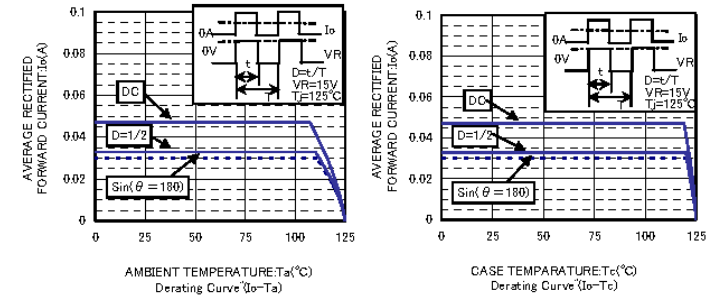
Characteristics at T_a = 25 °C

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at I_F = 1 mA	V_F	-	0.37	V
Reverse Current at V_R = 30 V	I_R	-	0.5	µA
Capacitance Between Terminals at V_R = 1 V, f = 1 MHz	C_T	2	-	pF

Note: ESD sensitive product handling required.


PEAK SURGE FORWARD CURRENT:IFSM(A)
Ifsm
1cyc
8.3ms
AVE:7.30A
IFSM DISPERSION MAP
8.3ms 8.3ms
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS
t
TIME:t(ms)
IFSM-t CHARACTERISTICS

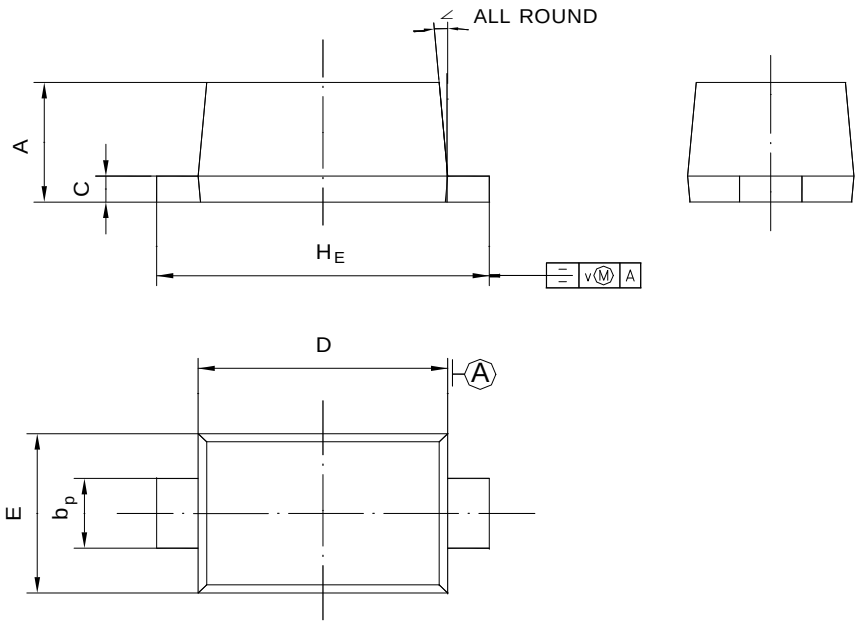

TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W)
Mounted on epoxy board
IM=1mA
IF=10mA
time
300us
Rth(j-a)
Rth(j-c)
TIME:t(s)
Rth-t CHARACTERISTICS
FORWARD POWER DISSIPATION:PF(W)
DC
D=1/2
Sin(θ=180)
AVERAGE RECTIFIED FORWARD CURRENT Io(A)
Io-Pf CHARACTERISTICS
REVERSE POWER DISSIPATION:PR(W)
REVERSE VOLTAGE:VR(V)
VR-PR CHARACTERISTICS


AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
0A
0V
Io
VR
t
T
D=t/T
VR=15V
Tj=125°C
DC
D=1/2
Sin(θ=180)
AMBIENT TEMPERATURE:Ta(°C)
Derating Curve (Io-Ta)
CASE TEMPARATURE:Tc(°C)
Derating Curve (Io-Tc)

PACKAGE OUTLINE

SOD-523

Plastic surface mounted package; 2 leads



UNIT	A	b_p	C	D	E	H_E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°