

**SURFACE MOUNT
SCHOTTKY BARRIER DIODE**

**REVERSE VOLTAGE – 40 Volts
FORWARD CURRENT – 0.1 Ampere**

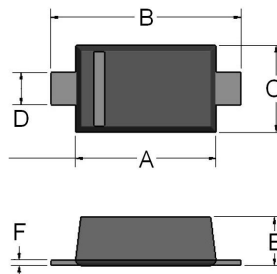
FEATURES

- Low Forward Voltage Drop
- Flat Lead SOD-323F Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

MECHANICAL DATA

- Case: SOD-323F Plastic

SOD-323F



SOD-323F		
DIM.	MIN.	MAX.
A	1.60	1.80
B	2.30	2.70
C	1.15	1.35
D	0.25	0.40
E	0.80	1.00
F	0.05	0.25
All Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	RB501V-40F	Units
Power Dissipation	P_D	200	mW
Repetitive Peak Reverse Voltage	V_{RM}	40	V
Peak Forward Surge Current @ $t_p=8.3\text{ms}$	I_{FSM}	1	A
Maximum DC Blocking Voltage	V_R	20	V
Average Forward Rectified Current	$I_{F(AV)}$	100	mA
Operating Temperature Range	T_J	+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+125	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Test Condition	Symbol	RB501V-40F	Unit
Breakdown Voltage	$I_R=500\mu\text{A}$	BV	42	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$V_R=10\text{V}$	I_R	30	μA
Maximum DC Forward Voltage	$I_F=10\text{mA}$ $I_F=100\text{mA}$	V_F	0.340 0.550	V

These ratings are limiting values above which the serviceability of the diode may be impaired.

REV. 0, Aug-2011, KSHR60

FIG.1-TYPICAL FORWORD CHARACTERISTICS

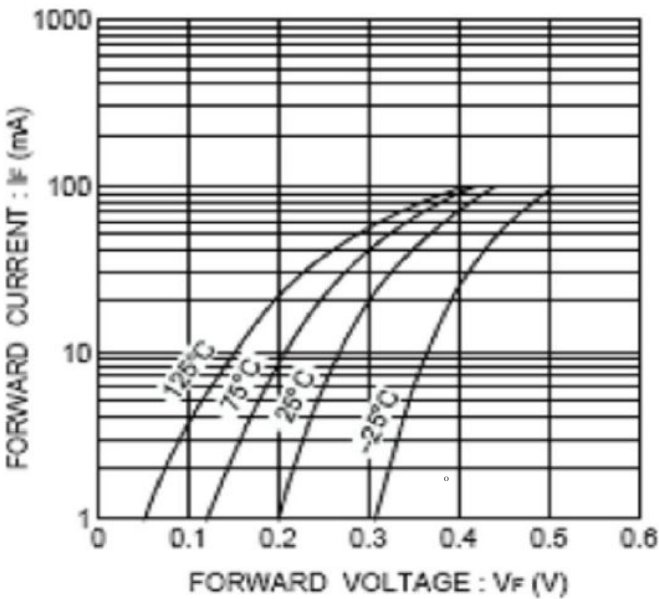


FIG.2-TYPICAL REVERSE CHARACTERISTICS

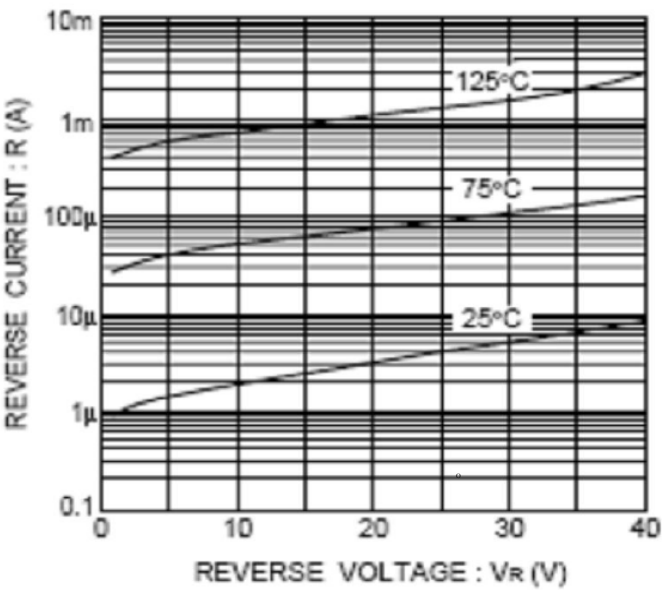


FIG.3-TYPICAL JUNCTION CAPACITANCE

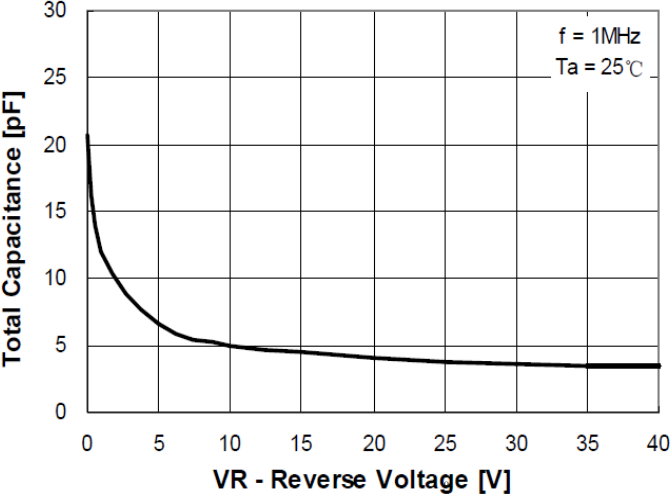
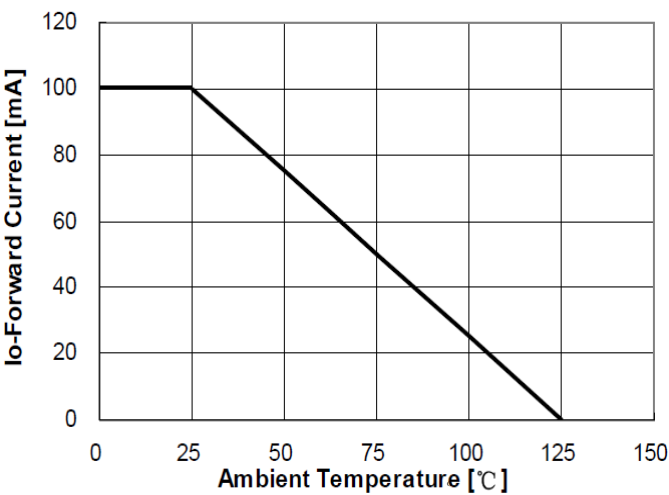


FIG.4-TYPICAL Forward Current Derating Curve



Device Marking :

Device P/N	Marking	Equivalent Circuit Diagram
RB501V-40F	B4	

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