



DATA SHEET

SEMICONDUCTOR

RB520S-30

200mW SOD-523 SURFACE MOUNT Very Small Outline Flat Lead Plastic Package Schottky Barrier Diode

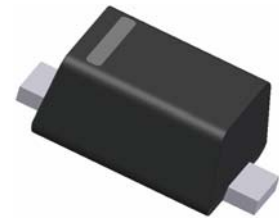


DEVICE MARKING CODES:

Device Type	Device Marking
RB520S-30	5J

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
V_R	Reverse Voltage	30	V
$I_{F(AV)}$	Average Forward Current	200	mA
I_{FSM}	Peak Forward Surge Current (At 8.3ms single half sine-wave)	1	A



SOD-523 Flat Lead

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

Specification Features:

- Low Forward Voltage Drop
- Flat Lead SOD-523 Small Outline Plastic Package
- Extremely Small SOD-523 Package
- Surface Device Type Mounting
- Moisture Sensitivity Level 1
- Pb Free Version and RoHS Compliant
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode



ELECTRICAL SYMBOL

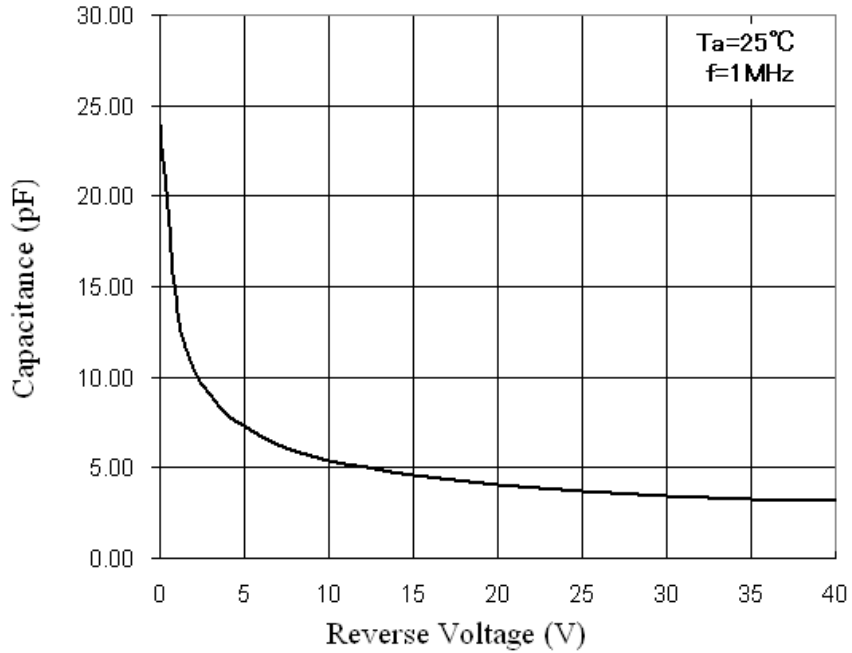
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R=500\mu\text{A}$	30		Volts
I_R	Reverse Leakage Current	$V_R=10\text{V}$		1	μA
V_F	Forward Voltage	$I_F=200\text{mA}$		0.6	Volts

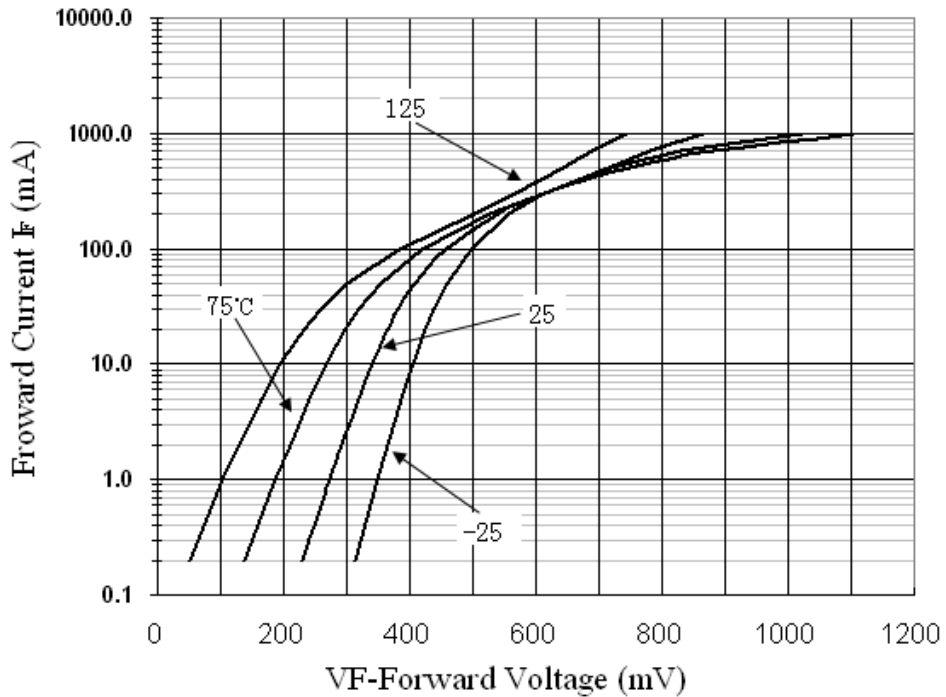
DEVICE CHARACTERISTICS

RB520S-30

Total Capacitance



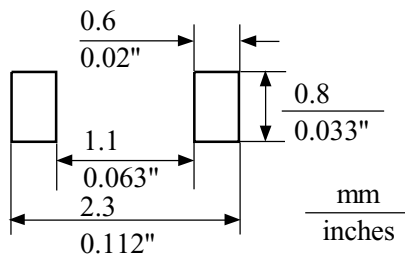
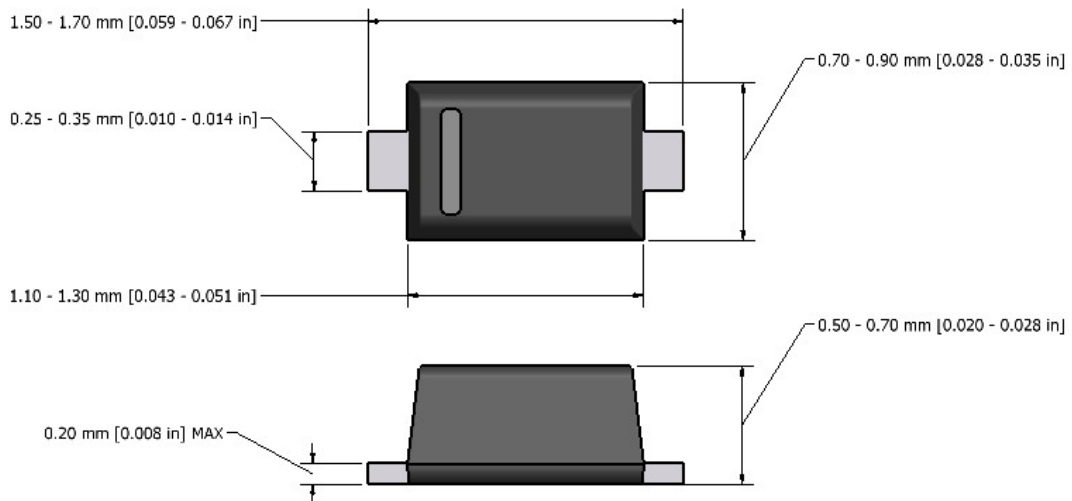
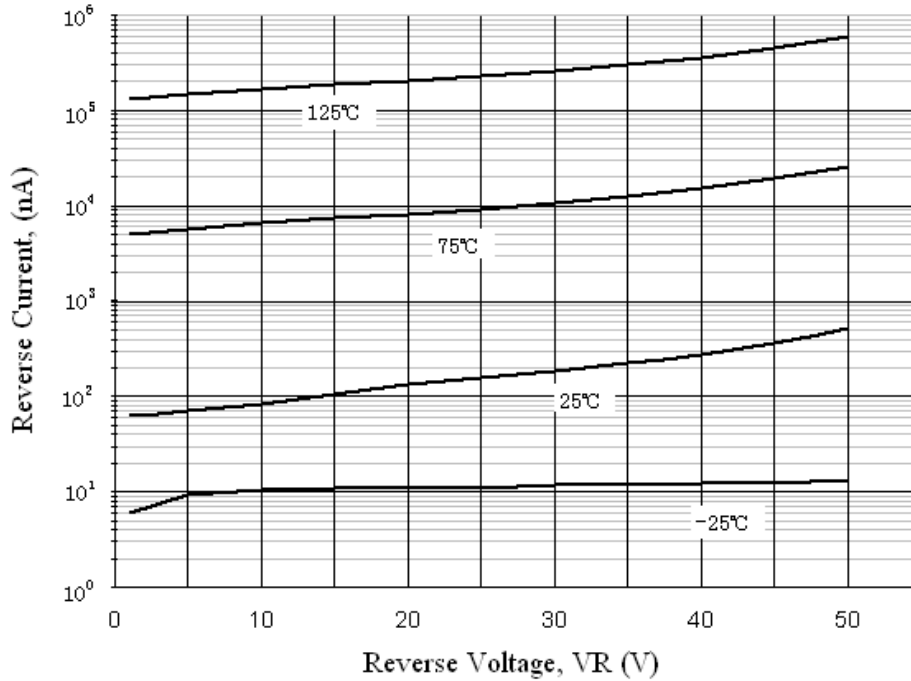
Forward Voltage vs Ambient Temperature



PACKAGE OUTLINE & DIMENSIONS

RB520S-30

Reverse Current vs Reverse Voltage



MOUNTING PAD