



YEA SHIN TECHNOLOGY CO., LTD

RB520S-30

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



**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

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



SOD-523 Flat Lead



ELECTRICAL SYMBOL

**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

**DEVICE MARKING CODES:**

Device Type	Device Marking
RB520S-30	5J

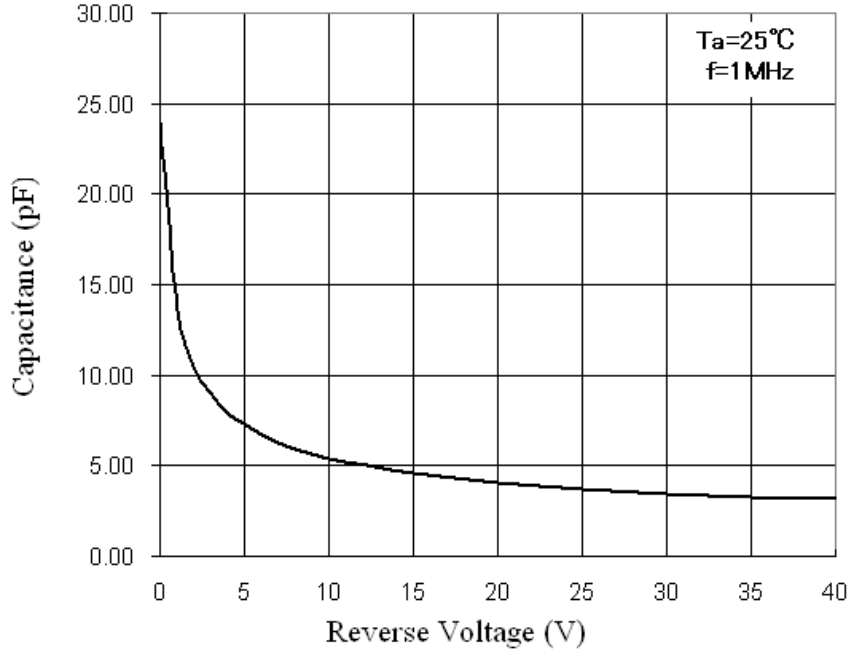
**Electrical Characteristics**  $T_A = 25^\circ\text{C}$  unless otherwise noted

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	$\mu\text{A}$
$V_F$	Forward Voltage	$I_F=200\text{mA}$		0.6	Volts

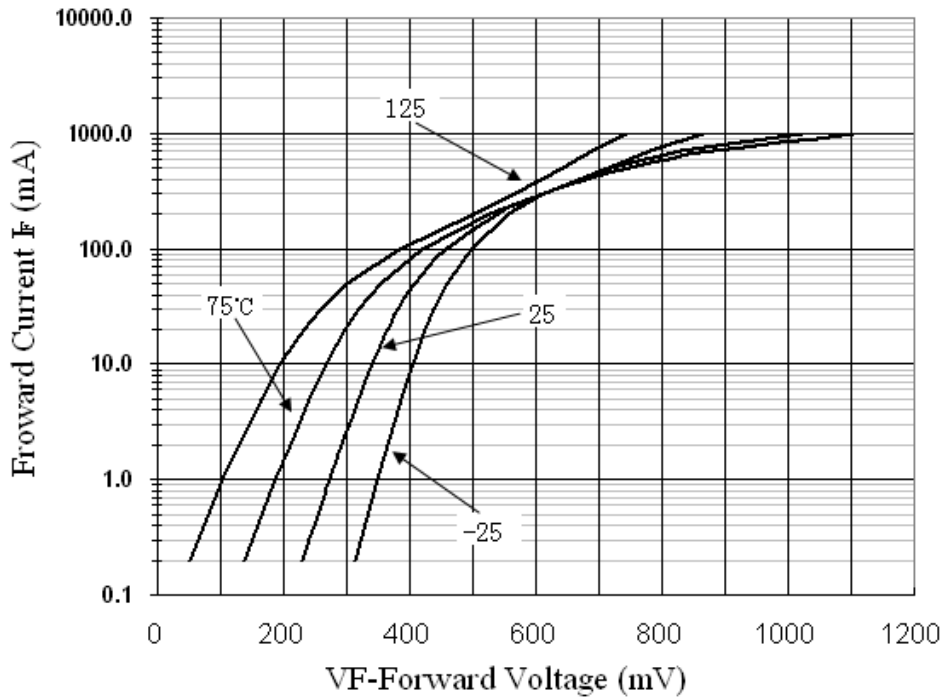
# DEVICE CHARACTERISTICS

## RB520S-30

### Total Capacitance



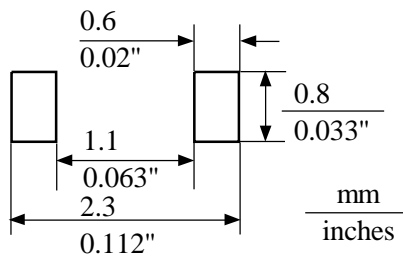
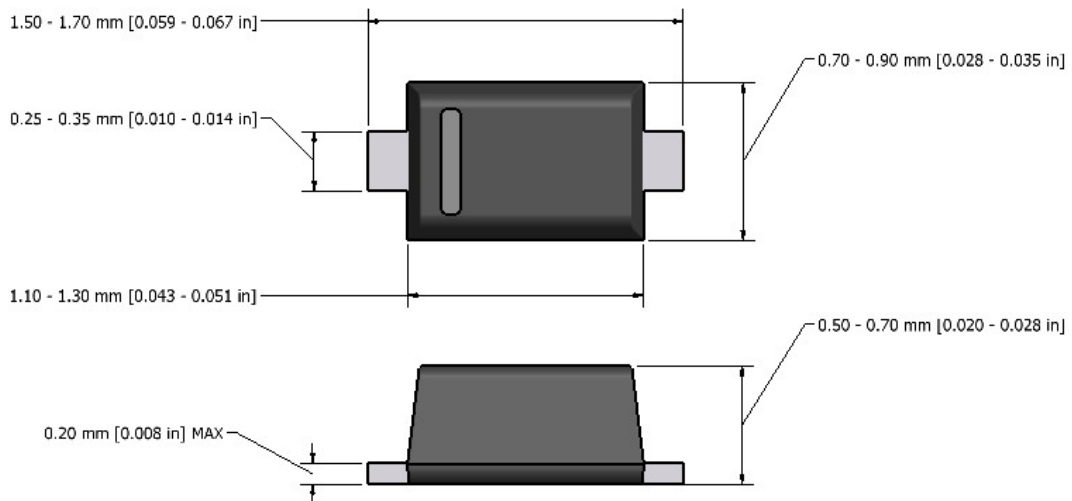
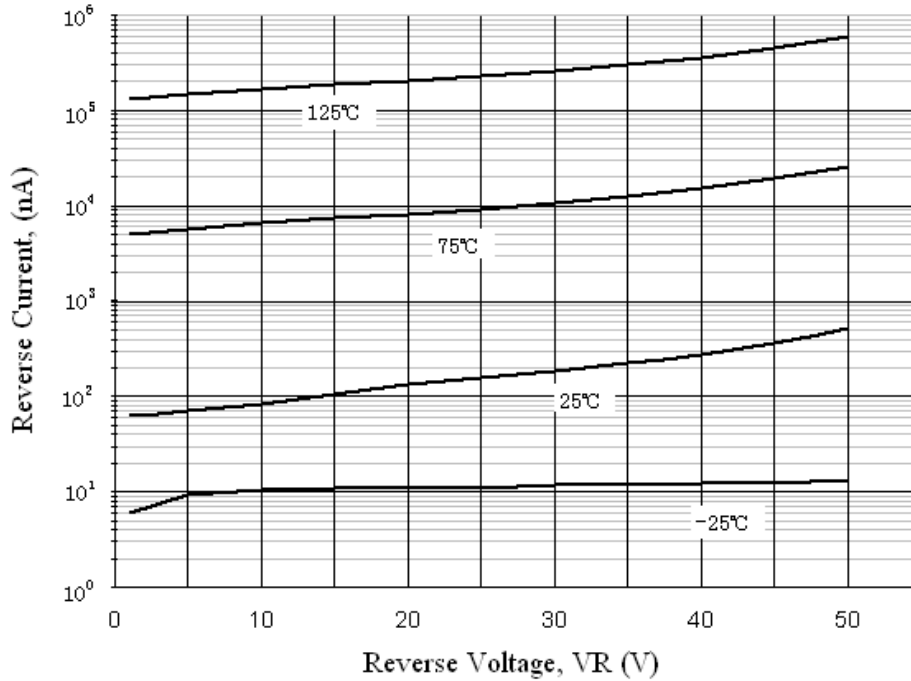
### Forward Voltage vs Ambient Temperature



# PACKAGE OUTLINE & DIMENSIONS

## RB520S-30

Reverse Current vs Reverse Voltage



MOUNTING PAD