

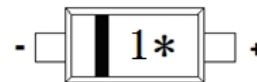
RB521C30
Schottky Barrier Diode
<http://www.willsemi.com>
Features

- 100mA Average rectified forward current
- Low forward voltage
- Low leakage current
- Small package SOD-923


SOD-923

Circuit
Applications

- Low Current rectification


Marking
Absolute maximum ratings

Parameter	Symbol	Value	Unit
Reverse voltage (repetitive peak)	V_{RM}	30	V
Reverse voltage (DC)	V_R	30	V
Average rectified forward current	I_O	100	mA
Peak forward surge current (8.3ms single sine pluse)	I_{FSM}	0.5	A
Junction temperature	T_J	150	°C
Operating temperature	T_{opr}	-40 ~ 125	°C
Storage temperature	T_{stg}	-40 ~ 150	°C

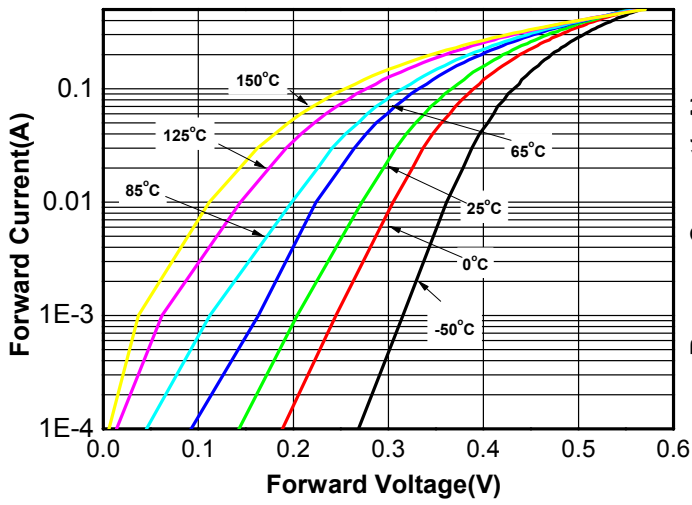
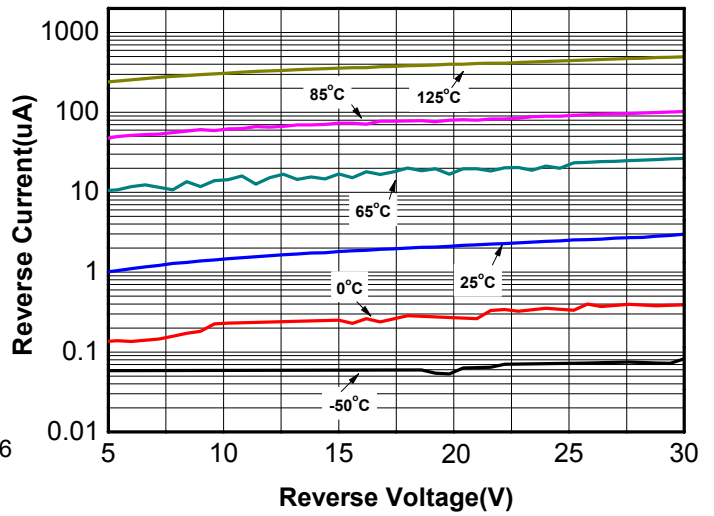
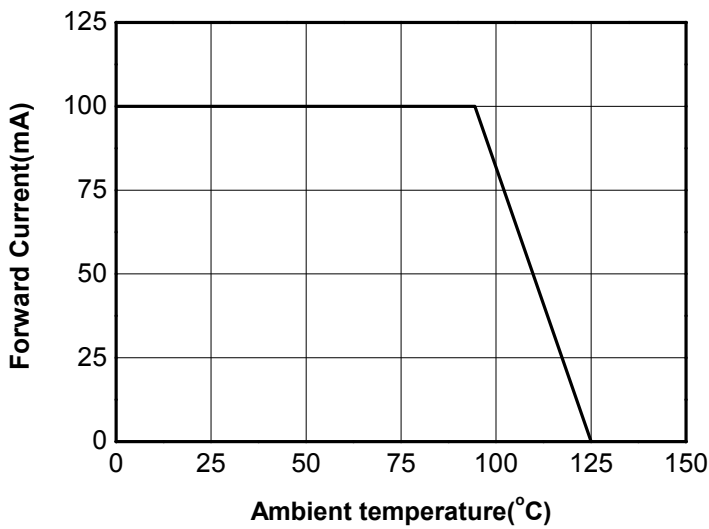
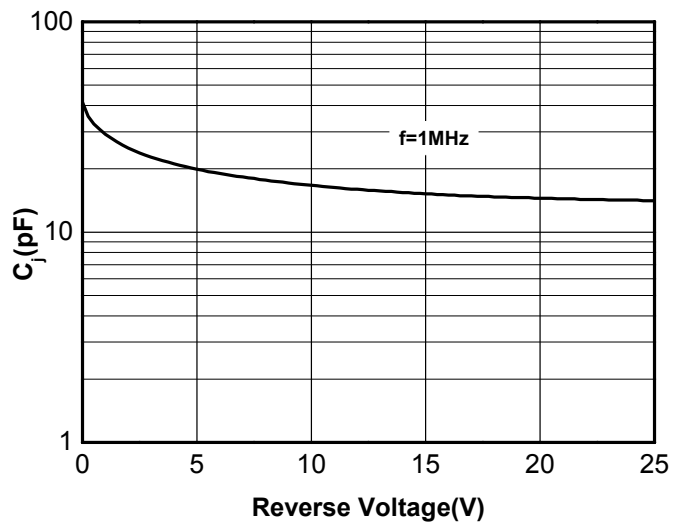
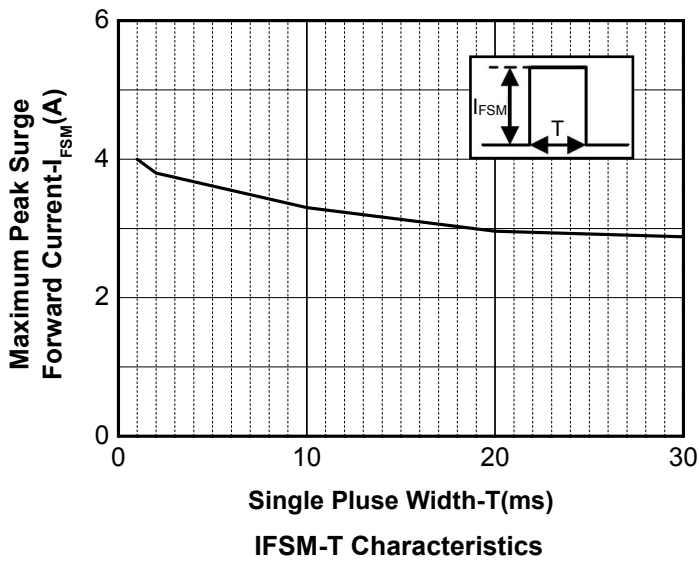
Electronics characteristics ($T_A=25^{\circ}C$)

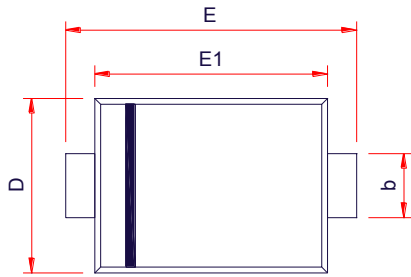
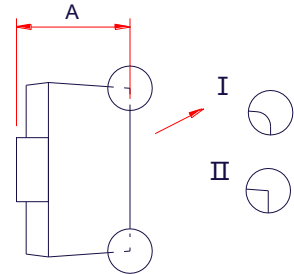
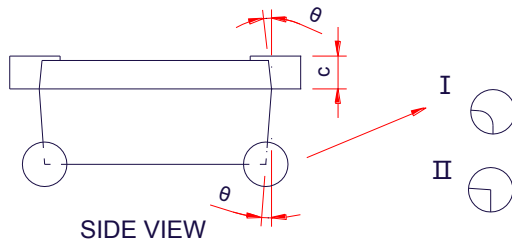
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Voltage	V_R	$I_R=100\mu A$	30			
Forward Voltage	V_F	$I_F=10mA$			0.35	V
		$I_F=100mA$			0.47	V
Reverse current	I_R	$V_R=10V$			6	μA
		$V_R=30V$			15	μA
Junction capacitance	C_J	$V_R=5V, F=1MHz$		21		pF
Thermal Resistance	$R_{\theta(JA)}$	Junction to Ambient		650		K/W

Order Informations

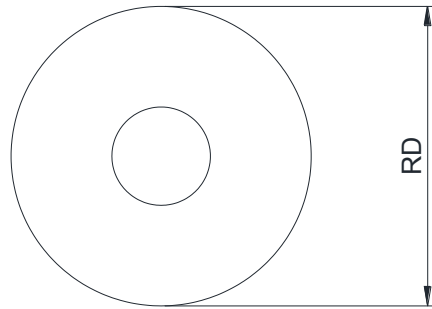
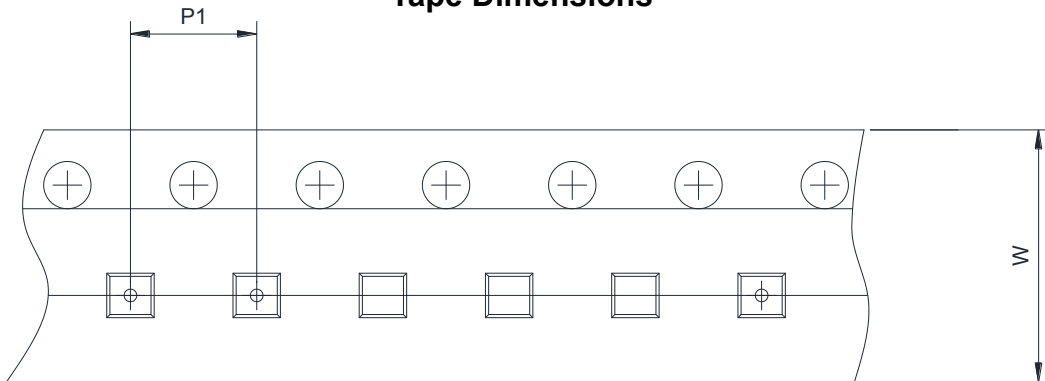
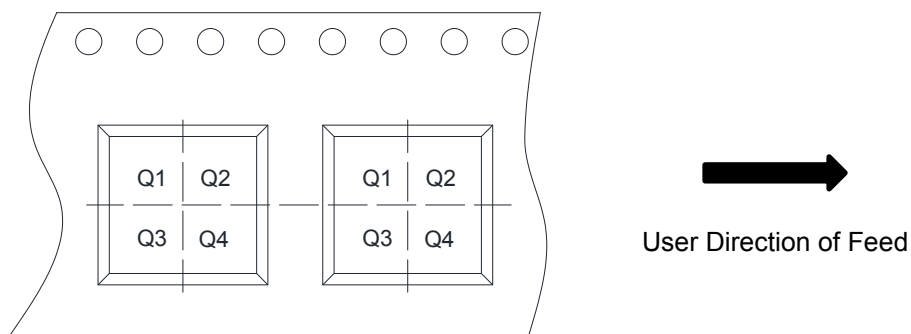
Device	Package	Marking	Shipping
RB521C30-2/TR	SOD-923	1* ⁽¹⁾	10000/Reel&Tape

Note 1: * = Month code(A~Z); 1 = Device code;

Typical characteristics (Ta=25°C, unless otherwise noted)

Forward voltage vs. Forward current

Reverse current vs. Reverse voltage

Forward current derating curve

Junction capacitance vs. Reverse voltage

Single Pulse Width-T(ms)
 I_{FSM} -T Characteristics

PACKAGE OUTLINE DIMENSIONS
SOD-923

TOP VIEW

SIDE VIEW

SIDE VIEW

Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.35	0.40	0.45
D	0.55	0.60	0.65
E	0.90	1.00	1.10
E1	0.70	0.80	0.90
b	0.15	-	0.30
c	-	-	0.20
θ	7° Ref		

TAPE AND REEL INFORMATION
Reel Dimensions

Tape Dimensions

Quadrant Assignments For PIN1 Orientation In Tape


RD	Reel Dimension	<input checked="" type="checkbox"/> 7inch	<input type="checkbox"/> 13inch
W	Overall width of the carrier tape	<input checked="" type="checkbox"/> 8mm	<input type="checkbox"/> 12mm <input type="checkbox"/> 16mm
P1	Pitch between successive cavity centers	<input checked="" type="checkbox"/> 2mm	<input type="checkbox"/> 4mm <input type="checkbox"/> 8mm
Pin1	Pin1 Quadrant	<input checked="" type="checkbox"/> Q1	<input checked="" type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4