



# NSR0130

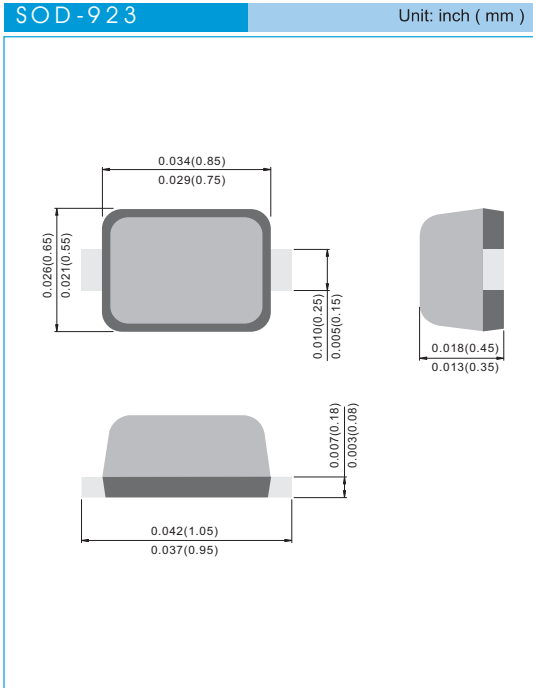
## SCHOTTKY BARRIER DIODE

### FEATURES

- Extremely Fast Switching Speed
- Extremely Low Forward Voltage 0.385V(max)@ $I_F=10\text{mA}$
- Low Reverse Current
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SOD-923, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Appox Weight : 0.0004gram
- Marking : M



### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Reverse Voltage	$V_R$	30	V
Forward Current DC	$I_F$	100	mA
Forward Current Surge Peak (60Hz, 1cycle)	$I_{FSM}$	1.0	A

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Total Device Dissipation FR-4 Board, (Note 1) $T_A=25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	200 2.0	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	650	$^\circ\text{C/W}$
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125	$^\circ\text{C}$

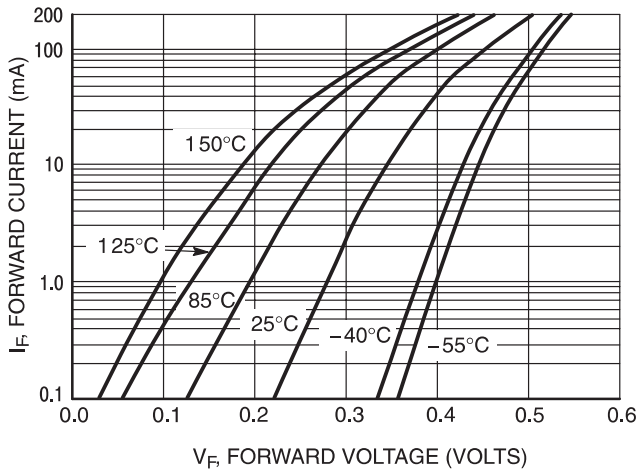
Notes : 1. Part mounted on FR-4 board with recommended pad layout



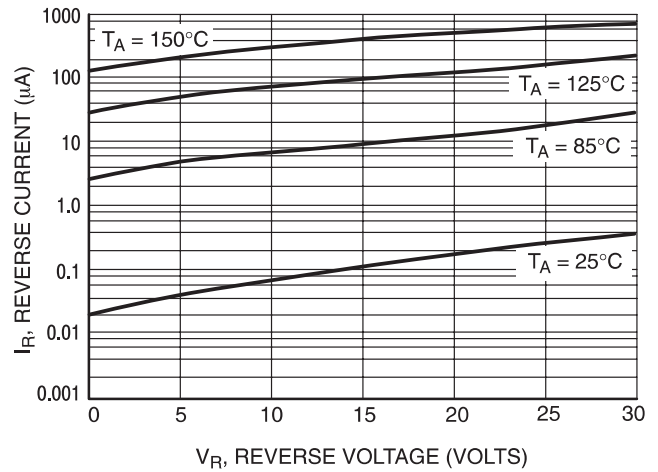
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## ELECTRICAL CHARACTERISTICS @ $T_A=25^\circ\text{C}$ unless otherwise specified

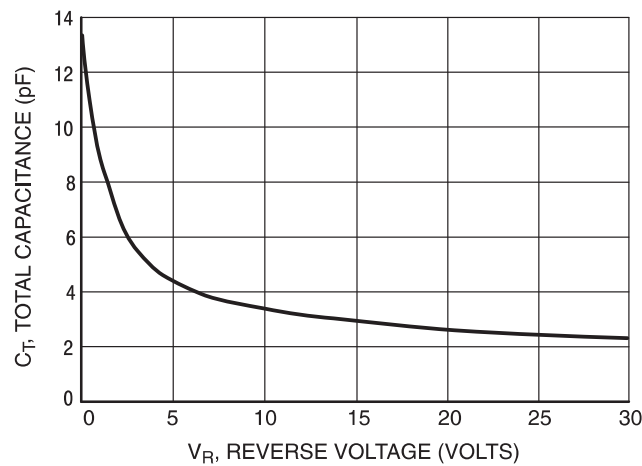
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Leakage ( $V_R=10\text{V}$ ) ( $V_R=30\text{V}$ )	$I_R$	-	-	0.35 3.0	$\mu\text{A}$
Forward Voltage ( $I_F=10\text{mA}$ ) ( $I_F=100\text{mA}$ )	$V_F$	-	-	0.385 0.525	V



**Figure 1. Forward Voltage**



**Figure 2. Leakage Current**



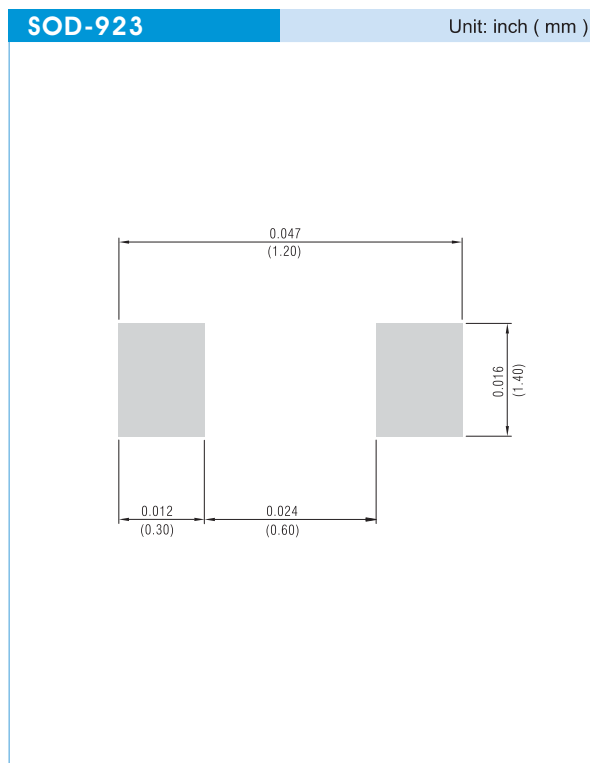
**Figure 3. Total Capacitance**

PRELIMINARY



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R - 8K per 7" plastic Reel

## LEGAL STATEMENT

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