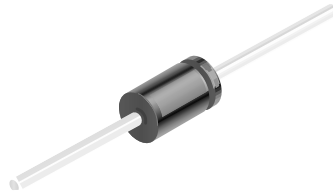


1S922/1S923



DO-35

Color Band Denotes Cathode

Small Signal Diode

Absolute Maximum Ratings*

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

Symbol	Parameter	Value	Units	
V_{RRM}	Maximum Repetitive Reverse Voltage	1S922	150	V
		1S923	200	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA	
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0	A	
		4.0	A	
T_{stg}	Storage Temperature Range	-65 to +200	$^\circ\text{C}$	
T_J	Operating Junction Temperature	175	$^\circ\text{C}$	

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	$^\circ\text{C}/\text{W}$

Electrical Characteristics

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

Symbol	Parameter	Test Conditions	Min	Max	Units
V_R	Breakdown Voltage	1S922	$I_R = 5 \mu\text{A}$	150	V
		1S923	$I_R = 5 \mu\text{A}$	200	V
V_F	Forward Voltage	$I_F = 200 \text{ mA}$		1.2	V
I_R	Reverse Current	1S922	$V_R = 150 \text{ V}$	100	nA
			$V_R = 150 \text{ V}, T_A = 150^\circ\text{C}$	50	μA
		1S923	$V_R = 200 \text{ V}$	100	nA
			$V_R = 200 \text{ V}, T_A = 150^\circ\text{C}$	50	μA

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Definition of Terms

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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