

1N459 - 1N459A

SMALL SIGNAL DIODES

Features

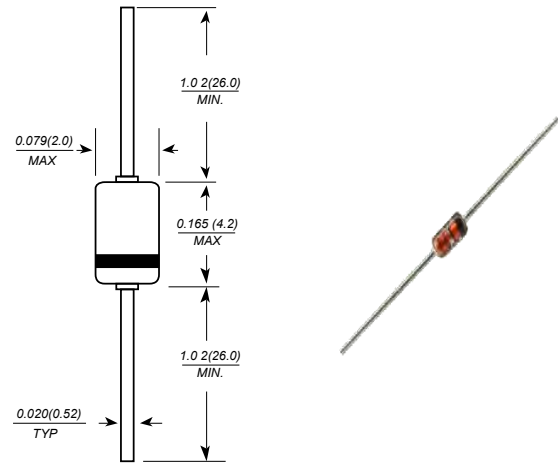
- Fast Switching Speed
Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
High Conductance

Mechanical Data

- Case: DO-35, glass case
- Polarity: Color band denotes cathode
- Weight: 0.004 ounces, 0.13 grams



DO-35(GLASS)



Dimensions in millimeters

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	200	V
$I_{F(AV)}$	Average Rectified Forward Current	500	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	$^\circ\text{C}$

Thermal Characteristics

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

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

Symbol	Parameter	Conditions	Min.	Max	Units
V_R	Breakdown Voltage	$I_R = 100\mu\text{A}$	200		V
V_F	Forward Voltage 1N459A	$I_F = 3\text{mA}$		1.0	V
		$I_F = 100\text{mA}$		1.0	V
I_R	Reverse Leakage	1N459		25	nA
		1N459A	$V_R = 175\text{V}, T_A = 150^\circ\text{C}$	5	μA
C_T	Total Capacitance	1N459A $V_R = 0, f = 1.0\text{MHz}$		6.0	pF