

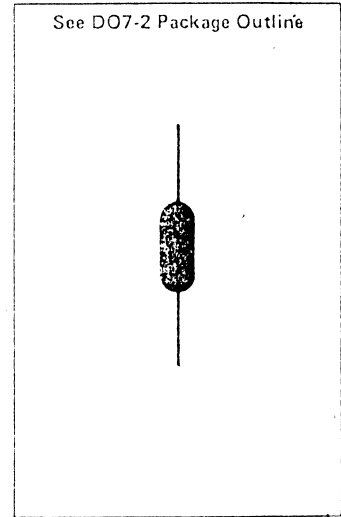
# 1N459 • 1N459A

LOW LEAKAGE  
 DIFFUSED SILICON PLANAR\* DIODES

- BV . . . 200 V (MIN) @ 100  $\mu$ A
- I<sub>R</sub> . . . 25 nA (MAX) @ 175 V

**ABSOLUTE MAXIMUM RATINGS (Note 1)**

Maximum Temperatures		
Storage Temperature		-65°C to +200°C
Operating Temperature		175°C
Maximum Power Dissipation		
Total Dissipation at 25°C Ambient Temperature		400 W
Maximum Voltages and Currents		
WIV Working Inverse Voltage		175 V
I <sub>O</sub> Average Rectified Current		40 mA
I <sub>F</sub> Forward Current Steady State DC		100 mA
i <sub>f</sub> Recurrent Peak Forward Current		125 mA
i <sub>f</sub> (surge) Peak Forward Surge Current		500 mA
	Pulse Width = 1.0 s	2.0 A
	Pulse Width = 1.0 $\mu$ s	



**ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)**

SYMBOL	CHARACTERISTIC	1N459		1N459A		UNITS	TEST CONDITIONS
		MIN.	MAX.	MIN.	MAX.		
V <sub>F</sub>	Forward Voltage		1.0		1.0	V	I <sub>F</sub> = 3.0 mA
I <sub>R</sub>	Reverse Current		25		25	nA	I <sub>F</sub> = 100 mA
			5.0		5.0	$\mu$ A	V <sub>R</sub> = 175 V, T <sub>A</sub> = 150°C
BV	Breakdown Voltage	200		200		V	I <sub>R</sub> = 100 $\mu$ A
C	Capacitance (Note 2)		6.0			pF	V <sub>R</sub> = 0, f = 1.0 MHz

