

1N458 • 1N458A

LOW LEAKAGE
DIFFUSED SILICON PLANAR* DIODES

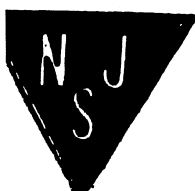
- BV ... 150 V (MIN) @ 100 μ A
- I_R ... 25 nA (MAX) @ 125 V 1N458

ABSOLUTE MAXIMUM RATINGS (Note 1)

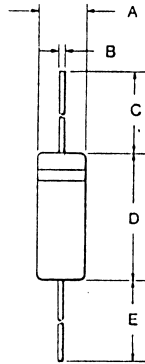
Maximum Temperatures		
Storage Temperature		-65°C to +200°C
Operating Temperature		175°C
Maximum Power Dissipation		
Total Dissipation at 25°C Ambient Temperature		400 mW
Maximum Voltage and Currents		
WIV	Working Inverse Voltage	125 V
I_O	Average Rectified Current	55 mA
I_F	Forward Current Steady State DC	115 mA
I_f	Recurrent Peak Forward Current	175 mA
i_f (surge)	Peak Forward Surge Current	
	Pulse Width = 1.0 s	500 mA
	Pulse Width = 1.0 μ s	2.0 A

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

SYMBOL	CHARACTERISTIC	1N458		1N458A		UNITS	TEST CONDITIONS
		MIN.	MAX.	MIN.	MAX.		
V_F	Forward Voltage		1.0			V	$I_F = 7.0$ mA
I_R	Reverse Current				1.0	V	$I_F = 100$ mA
			25			nA	$V_R = 125$ V
					5.0	nA	$V_R = 125$ V
BV	Breakdown Voltage	150	5.0	150	5.0	μ A	$V_R = 125$ V, $T_A = 150^\circ$ C
C	Capacitance (Note 2)		6.0			pF	$I_R = 100$ μ A
							$V_R = 0$, $f = 1.0$ MHz



Glass Diode (DO-7) outline



DIM.	INCHES			MILLIMETERS		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A			0.105			2.67
B		0.02			0.508	
C	1.0			25.40		
D			0.300			7.62
E	1.0			25.40		

NOTES: See table for dimensions in inches and millimeters
 .020 diameter domet leads, tinned or gold-plated
 Hermetically sealed glass
 Package weight is 0.25 grams