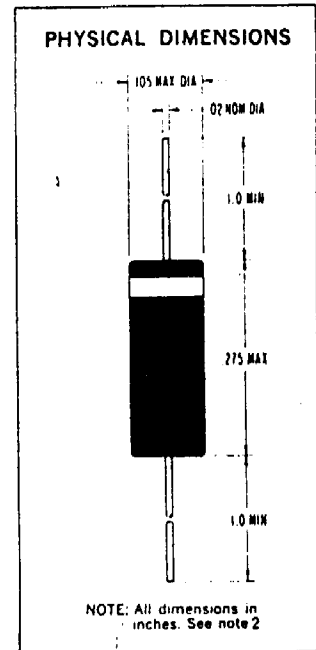


1N3595

The 1N3595 is a high conductance extremely low leakage planar diode. Specified maximum values for voltage drop capacitance and leakage current mean flexibility in designing circuits which require large numbers of diodes. In those applications where reverse current is a critical design parameter, the inherent qualities of the Fairchild process eliminates the problem of leakage degradation.

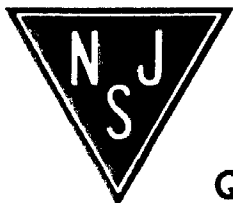
MAXIMUM RATINGS (25°C) (Note 1)

WIV	Working Inverse Voltage	125 V
I_o	Average rectified current	150 mA
I_f	Forward current steady state d.c.	225 mA
I_{rr}	Recurrent peak forward current	450 mA
I_{fs} (surge)	Peak forward surge current pulse width of 1 second	500 mA
I_{fs} (surge)	Peak forward surge current pulse width of 1 μ Sec.	4000 mA
P	Power dissipation	500 mW
1/ θ	Power derating factor	4 mW/°C
T_A	Operating temperature	-65°C to +150°C
T_{175}	Storage temperature, ambient	-65°C to +175°C



ELECTRICAL SPECIFICATIONS (25°C unless otherwise noted)

Symbol	Characteristic	Min.	Max.	Units	Test Conditions
V_{f1}	Forward Voltage	.83	1.00	Vdc	$I_f = 200$ mA
V_{f2}	Forward Voltage	.79	.92	Vdc	$I_f = 100$ mA
V_{f3}	Forward Voltage	.74	.88	Vdc	$I_f = 50$ mA
V_{f4}	Forward Voltage	.65	.80	Vdc	$I_f = 10$ mA
V_{f5}	Forward Voltage	.60	.75	Vdc	$I_f = 5$ mA
V_{f6}	Forward Voltage	.52	.68	Vdc	$I_f = 1$ mA
I_{r1}	Reverse Current		1.0	nA	$V_R = 125$ V
I_{r2}	Reverse Current (125°C)		300	nA	$V_R = 30$ V
I_{r3}	Reverse Current (125°C)		500	nA	$V_R = 125$ V
I_{r4}	Reverse Current (150°C)		3.0	μ A	$V_R = 125$ V
t_r	Reverse Recovery Time		3.0	μ Sec	See Table III
C	Capacitance [Note 3]		8.0	pf	$V_R = 0$ V
BV	Breakdown Voltage	150		Vdc	$I_R = 100$ μ A



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