

# HIGH CONDUCTANCE LOW LEAKAGE DIODES

T-01-09  
1N3595  
1N6099

## ABSOLUTE MAXIMUM RATINGS

- $B_v$  150 V (MIN) @ 100  $\mu$ A
- $V_r$  1.0 V @ 200 mA

### Temperatures

Storage Temperature Range	-65 °C to +200 °C
Maximum Junction Operating Temperature	+175 °C
Lead Temperature	+260 °C

### Power Dissipation

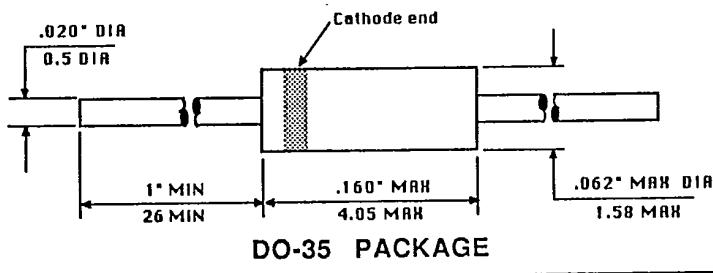
Maximum Total Power Dissipation at 25 °C Ambient	500 mW
Linear Power Derating Factor (from 25 °C)	3.33 mW/ °C

### Maximum Voltage and Currents

$WIV$	Working Inverse Voltage	125 V
$I_o$	Average Rectified Current	200 mA
$I_f$	Forward Current Steady State	500 mA
$I_f$	Peak Repetitive Forward Current	600 mA
$I_f$ (surge)	Peak Forward Surge Current	
	Pulse Width = 1.0 $\mu$ s	4.0 A
	Pulse Width = 1.0 s	1.0 A

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

SYMBOL	CHARACTERISTIC	MIN	MAX	UNITS	TEST CONDITIONS
$V_f$	Forward Voltage	0.83	1.0	V	$I_f$ = 200 mA
		0.79	0.92	V	$I_f$ = 100 mA
		0.75	0.88	V	$I_f$ = 50 mA
		0.65	0.80	V	$I_f$ = 10 mA
		0.60	0.75	V	$I_f$ = 5.0 mA
		0.52	0.68	V	$I_f$ = 1.0 mA
$I_r$	Reverse Current	1.0	nA		$V_R$ = 125 V
		300	nA		$V_R$ = 30 V, $T_A$ = 125 °C
		500	nA		$V_R$ = 125 V, $T_A$ = 125 °C
		3.0	$\mu$ A		$V_R$ = 125 V, $T_A$ = 150 °C
$B_v$	Breakdown Voltage	150		V	$I_R$ = 100 $\mu$ A
$T_{rr}$	Reverse Recovery Time	3.0	$\mu$ s		$I_f$ = 10 mA, $V_R$ = 3.5 V $R_L$ = 1.0 k $\Omega$
C	Capacitance	8.0		pF	$V_R$ = 0, f = 1.0 MHz



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