

1N4608
SILICON SWITCHING DIODE

*absolute maximum ratings at 25°C free-air temperature (unless otherwise noted)

$V_{RM(wkg)}$	Working Peak Reverse Voltage	70 V
P	Continuous Power Dissipation at (or below) 25°C Free-Air Temperature (See Note 1)	500 mW
T_{stg}	Storage Temperature Range	-65°C to 200°C
T_L	Lead Temperature 1/16 Inch from Case for 10 Seconds	300°C

*electrical characteristics at 25°C free-air temperature (unless otherwise noted)

PARAMETER	TEST CONDITIONS	1N4608		UNIT
		MIN	MAX	
$V_{(BR)}$ Reverse Breakdown Voltage	$I_R = 100 \mu A$	85		V
I_R Static Reverse Current	$V_R = 50 V$	0.1		μA
	$V_R = 70 V$	0.25		μA
	$V_R = 50 V, T_A = 100^\circ C$	25		μA
V_F Static Forward Voltage	$I_F = 0.1 mA$	0.39	0.49	V
	$I_F = 1 mA$	0.50	0.60	V
	$I_F = 10 mA$	0.61	0.71	V
	$I_F = 50 mA$, See Note 2			V
	$I_F = 100 mA$, See Note 2	0.74	0.85	V
	$I_F = 200 mA$, See Note 2			V
	$I_F = 250 mA$, See Note 2	0.81	0.93	V
	$I_F = 350 mA$, See Note 2	0.84	0.96	V
	$I_F = 400 mA$, See Note 2			V
	$I_F = 450 mA$, See Note 2	1.0		V
	$I_F = 500 mA$, See Note 2	1.1		V
C_T Total Capacitance	$V_R = 0, f = 1 MHz$	4		pF

NOTES: 1. Derate linearly to 200°C at the rate of 2.35 mW/deg.
2. These parameters must be measured using pulse techniques. $t_p \leq 300 \mu s$, duty cycle $\leq 2\%$.

†Trademark of Texas Instruments

*Indicates JEDEC registered data

*switching characteristics at 25°C free-air temperature -

PARAMETER	TEST CONDITIONS	1N4608		UNIT
		MIN	MAX	
t_{rr} Reverse Recovery Time	$I_F = 10 mA, I_{RM} = 1 mA,$ $i_{rr} = 0.1 mA, R_L = 100 \Omega$, See Figure 1			ns
	$I_F = I_{RM} = 10 mA$ to 200 mA, $i_{rr} = 0.1 I_F, R_L = 100 \Omega$, See Figure 2			ns
	$I_F = I_{RM} = 200 mA$ to 400 mA, $i_{rr} = 0.1 I_F, R_L = 100 \Omega$, See Figure 2			ns
	$I_F = 10 mA, I_{RM} = 10 mA,$ $i_{rr} = 1 mA, R_L = 100 \Omega$, See Figure 1	10		ns
	$I_F = 500 mA, I_{RM} = 500 mA,$ $i_{rr} = 50 mA, R_L = 100 \Omega$, See Figure 2	15		ns



Quality Semi-Conductors