

Type No.	PRV	Max. Cont. Reverse Voltage	Maximum Forward Current — ma			Min. Forward Current @ +1V ma	Maximum Reverse Current				Comments
			Average	Recurrent Peak	1 sec. Surge		Volts	μa	Volts	μa	
1N118A	75	60	70	250	400	40			-50	100	High conduction
1N273	35	30	80		450	100	-20	20			
1N279	39	30	80		450	100	-20	200			
1N281	75	60	75		400	100	-10	30	-50	500	
1N292	75	60	70		150	100			-50	200	
1N298A	85	70	30		300	3.5	-5	10	-40 ⁽²⁾	250 ⁽²⁾	Computer diode
1N309	40	30	100			100	-20	100			High conduction
1N313		100	40		500	20	-20	10	-100	50	Low leakage diode
1N449	40	30	60			50	-10	10	-30	30	High conduction
1N497	30	20	60			100	-20	20			Low leakage
1N774	70	60	50		450	100	-10	15	-50	150	High conduction
1N776	30	20	45		400	50	-10	200	-30	500	
1N777	70	60	50		450	100	-10	25 ⁽³⁾	-50 ⁽³⁾	125 ⁽³⁾	Switching diode

NOTES: (1) Measured at 75°C unless otherwise specified. (2) Measured at 50°C. (3) Measured at 55°C.

Video Detector Diodes** (See Outline Drawing No. 37)

Type No.	PRV	Maximum Reverse Current		Max. Average Rectified Forward Current (ma)
		Volts	μa	
1N60	30	-10	67	50
1N60A	40	-10	60	50
1N60C	50	-10	67	50
1N64	25	-10	100	50
1N87A	30	-1.5	30	50
1N295A	40	-10	200	35
1N616	30	-10	100	50

** Made in Canada by Canadian General Electric.

TUNNEL DIODES — General Purpose

Type	Dwg. No.	Peak Point Current I _P ma	MAXIMUM		Peak Voltage V _P mv	Max. Series Resist. R _S Ohms	Negative Conductance -G mhos × 10 ⁻³	Typical Resistive Cutoff Frequency F _{RO} KMC	Comments
			Valley Point Current I _V ma	Capacitance C pf					
1N2939	46	1.0 ± 10%	0.14	15	65 Typ.	4.0	6.6 Typ.	2.2	General purpose switching, oscillator, amplifier and converter circuits. Nominal series inductance, L _s is 4 nh. TO-18 package.
1N2939A	46	1.0 ± 2.5%	0.14	10	60 ± 10	4.0	6.6 Typ.	2.6	
1N2940	46	1.0 ± 10%	0.22	10	65 Typ.	4.0	6.6 Typ.	2.2	
1N2940A	46	1.0 ± 2.5%	0.22	7	65 ± 10	4.0	6.6 Typ.	2.6	
1N2941	46	4.7 ± 10%	1.04	50	65 Typ.	2.0	30 Typ.	2.6	
1N2941A	46	4.7 ± 2.5%	1.04	30	65 ± 10	2.0	30 Typ.	3.9	
1N2969	46	2.2 ± 10%	0.48	25	65 Typ.	3.0	16 Typ.	2.5	
1N2969A	46	2.2 ± 2.5%	0.48	15	65 ± 10	3.0	16 Typ.	3.3	
1N3149	46	10.0 ± 10%	2.2	90	65 Typ.	1.5	60 Typ.	2.6	
1N3149A	46	10.0 ± 2.5%	2.2	50	65 ± 10	1.5	60 Typ.	3.1	
1N3150	46	22.0 ± 10%	4.8	150	65 Typ.	1.0	100 Typ.	2.2	
1N3712 (TD-1)	47	1.0 ± 10%	0.18	10	65 Typ.	4.0	8 Typ.	2.3	
1N3713 (TD-1A)	47	1.0 ± 2.5%	0.14	5	65 ± 7	4.0	8.5 ± 1	3.2	
1N3714 (TD-2)	47	2.2 ± 10%	0.48	25	65 Typ.	3.0	18 Typ.	2.2	
1N3715 (TD-2A)	47	2.2 ± 2.5%	0.31	10	65 ± 7	3.0	19 ± 3	3.0	
1N3716 (TD-3)	47	4.7 ± 10%	1.04	50	65 Typ.	2.0	40 Typ.	1.8	
1N3717 (TD-3A)	47	4.7 ± 2.5%	0.60	25	65 ± 7	2.0	41 ± 5	3.4	
1N3718 (TD-4)	47	10.0 ± 10%	2.20	90	65 Typ.	1.5	80 Typ.	1.6	
1N3719 (TD-4A)	47	10.0 ± 2.5%	1.40	50	65 ± 7	1.5	85 ± 10	2.8	
1N3720 (TD-5)	47	22.0 ± 10%	4.80	150	65 Typ.	1.0	180 Typ.	1.6	
1N3721 (TD-5A)	47	22.0 ± 2.5%	3.10	100	65 ± 7	1.0	190 ± 30	2.6	
TD-9	47	0.5 ± 10%	0.10	5	60 Typ.	6.0	4.0 Typ.	1.3	

Ultra-High Speed Switching (See Outline Drawing No. 48)

Type	Peak Point Current I_P ma	MAXIMUM		VOLTAGE			Typical Series Resistance R_S ohms	Typical Rise Time t_r psec.	Comments
		Valley Point Current I_V ma	Capacitance C pf	Peak Point V_P mv	Forward $I_F=0.25 I_P$ V_{FS} mv	Forward $I_F=I_P$ V_{FP} mv			
TD-251	2.2 ± 10%	0.31	3.0	70 Typ.	420 Min.	500-650	5.0	430	Extremely high speed memory circuits, logic circuits, pulse generators and threshold detectors. Housed in a subminiature epoxy package with series conductance, L_s , of 1.5 nh.
TD-251A	2.2 ± 10%	0.31	1.0	110 Max.	420 Min.	500-650	7.0	160	
TD-252	4.7 ± 10%	0.60	4.0	80 Typ.	435 Min.	500-650	3.5	320	
TD-252A	4.7 ± 10%	0.60	1.0	120 Max.	435 Min.	500-650	4.0	74	
TD-253	10.0 ± 10%	1.40	9.0	75 Typ.	450 Min.	500-650	1.7	350	
TD-253A	10.0 ± 10%	1.40	5.0	80 Typ.	450 Min.	520-650	2.0	190	
TD-253B	10.0 ± 10%	1.40	2.0	120 Max.	450 Min.	550-650	2.5	68	
TD-254	22.0 ± 10%	3.80	18.0	90 Typ.	520 Typ.	600 Typ.	1.8	185	
TD-254A	22.0 ± 10%	3.80	4.0	120 Max.	460 Min.	550-650	2.0	64	
TD-255	50.0 ± 10%	8.50	25.0	110 Typ.	530 Typ.	625 Typ.	1.4	100	
TD-255A	50.0 ± 10%	8.50	5.0	130 Typ.	480 Min.	640 Typ.	1.5	35	
TD-256	100 ± 10%	17.50	35.0	150 Typ.	530 Typ.	650 Typ.	1.1	57	
TD-256A	100 ± 10%	17.50	6.0	180 Typ.	500 Min.	660 Typ.	1.2	22	

Microwave (See Outline Drawing No. 49)

Type	Typical Peak Point Current I_P ma	Negative Resistance R ohms	Maximum Junction Capacitance C_j pf	Maximum Series Resistance R_S ohms	Minimum Resistive Cutoff Frequency f_{ro} GC	Comments
TD-401	2.0	65-75	2.60	5	5	High performance microwave pill package with series inductance, L_s , of 0.1 nh and package capacitance, C_p , of 0.1 PF. Units can be stud mounted on request.
TD-402	2.0	65-75	1.30	5	10	
TD-403	2.0	65-75	0.89	5	15	
TD-404	2.0	65-75	0.67	5	20	
TD-405	2.0	65-75	0.54	6	25	
TD-406	2.0	65-75	0.45	6	30	
TD-407	2.0	65-75	0.40	6	35	
TD-408	2.0	65-75	0.35	6	40	

Back Diodes

Type	Dwg. No.	MAXIMUM		MINIMUM Reverse Voltage		Forward Current I_{F1} ($V_{F1}=90 \pm 10$ mv) ma	Typical Forward Voltage V_{F2} ($I_{F2}=3 I_{F1}$) mv	Comments
		Peak Point Current I_P ma	Total Capacitance C pf	V_{R1} ($I_R=I_P$ max) mv	V_{R2} ($I_R=1$ ma) mv			
BD-1	50	1.0	20	440	440	10.0	120	BD-1 through -7 are general purpose types for use in mixer, detectors and switching circuits housed in miniature axial package. BD-400 series are microwave versions featuring low capacitance and a pill package with a series inductance L_s , of 0.1 nh.
BD-2	50	0.5	10	420	465	5.0	130	
BD-402	49	0.5	3	420	465	5.0	130	
BD-3	50	0.2	10	400	465	2.0	170	
BD-403	49	0.2	1	400	465	2.0	170	
BD-4	50	0.1	10	380	465	1.0	170	
BD-404	49	0.1	1	380	465	1.0	170	
BD-5	50	0.05	10	350	465	0.5	160	
BD-405	49	0.05	1	350	465	0.5	160	
BD-6	50	0.02	10	330	465	0.2	160	
BD-406	49	0.02	2	330	465	0.2	160	
BD-7	50	0.01	10	300	465	0.1	160	
1N4090	48	0.2	1.5	430	500	2.0 ($V_{F1}=100 \pm 20$ MV)	170	

GALLIUM ARSENIDE TUNNEL DIODES (See Outline Drawing No. 50)

Type	Peak Point Current I_P ma	MAXIMUM		Peak Voltage V_P mv	Forward Voltage ($I_F=I_P$) V_{FP} mv	Negative Conductance $-G$ mhos $\times 10^{-3}$	Max. Series Resist. R_S ohms	Comments
		Valley Point Current I_V ma	Capacitance C pf					
1N3118	10 ± 10%	1.10	20	160 typ.	900 min.	40	5	Oscillator circuits where wide voltage swing is required. Series inductance, L_s , is 4 nh. TO-18 package.