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TUNNEL DIODES

GENERAL PURPOSE

+ 100° C Operation TD-1	I_p * Peak Point Current (mA)	I_v Valley Point Current Max. (mA)	C Capacitance Max. (pF)	V_p Peak Point Voltage Typ. (mV)	V_v Valley Voltage Typ. (mV)	V_{fp} Forward Peak Voltage Typ. (mV)	R_s Series Resist. Max. (ohms)	--G Negative Conductive (mhos X 10^{-6})	f_{RO} Resistive Cutoff Frequency Typ. (GHz)
1N3712	1.0 ± 10%	0.18	10	65	350	500	4.0	8 Typ.	2.3
1N3713*	1.0 ± 2.5%	0.14	5	65	350	510	4.0	6.5 ± 1	3.2
1N3714	2.2 ± 10%	0.48	25	65	350	500	3.0	18 Typ.	2.2
1N3715*	2.2 ± 2.5%	0.32	10	65	350	510	3.0	19 ± 3	3.0
1N3716	4.7 ± 10%	1.04	50	65	350	500	2.0	40 Typ.	1.8
1N3717*	4.7 ± 2.5%	0.60	25	65	350	510	2.0	41 ± 5	3.4
1N3718	10.0 ± 10%	2.20	90	65	350	500	1.5	80 Typ.	1.6
1N3719*	10.0 ± 2.5%	1.40	50	65	350	510	1.5	85 ± 10	2.8
1N3720	22.0 ± 10%	4.80	150	65	350	500	1.0	180 Typ.	1.6
1N3721*	22.0 ± 2.5%	3.10	100	65	350	510	1.0	190 ± 30	2.6
TD-9	0.5 ± 10%	0.10	5	60	--	--	6.0	4.0 Typ.	1.3

ULTRA HIGH-SPEED SWITCHING

+ 100° C Operation TD-260*	I_p Peak Point Current (mA)	I_v Valley Point Current Max. (mA)	C Capacitance Max. (pF)	V_p Peak Point Voltage Typical (mV)	V_v Valley Voltage Typical (mV)	V_{fp} Forward Voltage @ $I_f = I_p$ Typical (mV)	R_s Series Resist. Typical (ohms)	t_r Rise Time Typical (psec.)
TD-261	2.2 ± 10%	0.31	3.0	70	390	500 - 700	5.0	430
TD-261A	2.2 ± 10%	0.31	1.0	80	390	500 - 700	7.0	160
TD-262	4.7 ± 10%	0.60	6.0	80	390	500 - 700	3.5	320
TD-262A	4.7 ± 10%	0.60	1.0	90	400	500 - 700	4.0	74
TD-263	10.0 ± 10%	1.40	9.0	75	400	500 - 700	1.7	350
TD-263A	10.0 ± 10%	1.40	5.0	80	410	520 - 700	2.0	190
TD-263B	10.0 ± 10%	1.40	2.0	90	420	550 - 700	2.5	68
TD-264	22.0 ± 10%	3.80	18.0	90	425	600 Typ.	1.8	185
TD-264A	22.0 ± 10%	3.80	4.0	100	425	550 - 700	2.0	64
TD-265	50.0 ± 10%	8.50	25.0	110	425	625 Typ.	1.4	100
TD-265A	50.0 ± 10%	8.50	5.0	130	425	640 Typ.	1.5	35
TD-266	100 ± 10%	17.50	35.0	150	450	650 Typ.	1.1	57
TD-266A	100 ± 10%	17.50	6.0	180	450	660 Typ.	1.2	22

BACK DIODES

GENERAL PURPOSE

GE Type	I_p Peak Point Current Max. (mA)	C Total Capacitance Max. (pF)	Reverse Voltage Min V_{R1} @ $I_R = I_p$ max (mV)	Reverse Voltage Min V_{R2} @ 1 mA (mV)	I_{F1} Forward Current @ V_{F1} = 90 ± 10 mV (mA)	V_{F2} Forward Voltage @ $I_{F2} = 3\ I_{F1}$ Typical (mV)	t_r Rise Time Typical (psec.)
BD-1	1.0	20	440	440	10.0	120	1.0
BD-2	0.5	10	420	465	5.0	130	0.7
BD-3	0.2	10	400	465	2.0	170	0.5
BD-4	0.1	10	380	465	1.0	170	0.4
BD-5	0.05	10	350	465	0.5	160	0.4
BD-6	0.02	10	330	465	0.2	160	0.4
BD-7	0.01	10	300	465	0.1	160	0.4

* Military version available