

GaAs Multiplier Varactor Diodes

Breakdown Voltage	Typical Total Capacitance C_T (at 0V) (pF)	Typical Junction Capacitance C_T (at 0V) (pF)	Type No.	ESA/SCC Detail Specification No.	Package Styles
15V	0.40 to 0.80	0.20 to 0.60	ML48701E to ML48705E	5512/010	30, 31, 36, 94, 95, 96, 97, 118, 120, 138
25V	0.40 to 0.60 0.70 to 0.80	0.20 to 0.40 0.50 to 0.60	ML48706C to ML48708C ML48709B to ML48710B	5512/011 5512/011	As Above.

1. Available in pill, stripline and pill-with-tabs packages.
2. Chart III(a) Category 1 (HTRB only).

Silicon Pin Diodes (Normal Device Polarity)

Breakdown Voltage	Typical Total Capacitance C_j (at -10V) (pF)	Typical Minority Carrier Lifetime T_L (ns)	Type No.	ESA/SCC Detail Specification No.	Package Styles
15V	0.15	10	ML4610	5513/009	30, 31, 32, 34, 36, 43, 56, 91, 92, 94, 95, 97, 101, 103, 118, 120, 128, 138, 148, 186, 255, 275, 276
40V	0.10 to 0.2	20	ML4611 to ML4612	5513/010	As Above.
70V	0.10 to 0.2	60	ML4614 to ML4615	5513/010	As Above.
100V	0.10 to 0.30	120	ML4617 to ML4619	5513/009	As Above.
150V	0.10 to 0.30	250	ML4622 to ML4624	5513/014	As Above.
200V	0.10 to 0.30	500	ML4627 to ML4629	5513/015	As Above.
300V	0.10 to 0.20	500 to 800	ML4640 to ML4641	5513/012	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 186, 255
	0.30 to 0.50	1000 to 1000	ML4642 to ML4643	5513/012	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 255
400V	0.1	1000	ML4644	5513/012	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 186, 255
	0.20 to 0.30	1500 to 2000	ML4645 to ML4646	5513/012	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 186, 255
	0.5	2000	ML4647	5513/012	36, 43, 56, 101
500V	0.1	1000	ML4648	5513/013	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 186, 255
	0.20 to 0.30	1500 to 2000	ML4649 to ML4650	5513/013	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 186, 255
	0.5	2000	ML4651	5513/013	36, 43, 56, 101
600V	0.1	1500	ML4652	5513/013	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 186, 255
	0.20 to 0.30	2000 to 3000	ML4653 to ML4654	5513/013	30, 31, 32, 34, 36, 43, 56, 91, 92, 101, 103, 186, 255
	0.5	3000	ML4655	5513/013	36, 43, 56, 101

1. Available in pill, stripline and pill-with-tabs packages.
2. Chart III(a) Category 3 (HTRB & Power Burn-In).

Specifications Subject to Change Without Notice.

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Silicon Pin Diodes (Reverse Device Polarity)

Breakdown Voltage	Typical Junction Capacitance C_T (at -10V) (pf)	Typical Minority Carrier Lifetime T_L (ns)	Type No.	ESA/SCC Detail Specification No.	Package Styles
15V	0.20	10	ML4609	5513/008	30, 31, 32, 34, 36, 43, 56, 91, 92, 94, 95, 96, 97, 101, 103, 118, 120, 128, 138, 148, 186, 255, 275, 276
40V	0.10 to 0.20 0.20	20 20	ML4611P to ML4612P ML4613	5513/020 5513/008	As Above.
70V	0.10 to 0.20 0.20	60 60	ML4614P to ML4615P ML4616	5513/020 5513/008	As Above.
100V	0.10 to 0.30 0.20 to 0.30	120 120	ML4617P to ML4619P ML4620 to ML4621	5513/002 5513/011	As Above.
150V	0.10 to 0.30 0.20 to 0.30	250 250	ML4622P to ML4624P ML4625 to ML4626	5513/018 5513/011	As Above.
200V	0.10 to 0.30 0.20 to 0.30	400 400	ML4627P to ML4629P ML4630 to ML4631	5513/019 5513/003	As Above.

1. Available in pill, stripline and pill-with-tabs packages.
2. Chart III(a) Category 3 (HTRB & Power Burn-In).

Silicon Pin Diodes – Glass Encapsulated

Breakdown Voltage	Typical Junction Capacitance C_j (at -10V) (pF)	Typical Minority Carrier Lifetime T_L (ns)	Type No.	ESA/SCC Detail Specification No.	Package Styles
35V	0.10 to 1.05	150	ML4603 to ML4605	5513/004	54
100V	0.10 to 1.05	350	ML4606 to ML4608	5513/004	54

Chart III(a) Category 3 (HTRB & Power Burn-In).

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GaAs Schottky Mixer Diodes

Test Frequency	Maximum Total Capacitance C_T (at 0V) (pF) (ODS 119)	Noise Figure N.F. (dB)		Type No.	ESA/SCC Detail Specification No.	Package Styles
		Typ	Max			
9.375 GHz	0.31	5.0	6.5	ML40461	5513/021	118, 119, 120, 148, 186, 255, 275, 276
16.000 GHz	0.31	5.5	7.0	ML40462	5513/021	As Above.
24.000 GHz	0.29	6.5	7.5	ML40463	5513/021	As Above.
36.000 GHz	0.28	7.0	7.5	ML40464	5513/021	As Above.

1. Available in pill, stripline and pill-with-tabs packages.
2. Chart III(a) Category 3 (HTRB & Power Burn-In).

Silicon Limiter Diodes

Breakdown Voltage	Typical Junction Capacitance C_j (at 0V) (pF)	Typical Minority Carrier Lifetime T_L (ns)	Type No.	ESA/SCC Detail Specification No.	Package Styles
50V	0.30 to 0.10	20 to 15	ML4207 to ML4209	5513/007	As Above.

1. Available in pill, stripline and pill-with-tabs packages.
2. Chart III(a) Category 3 (HTRB & Power Burn-In).

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