



**GENERAL PURPOSE ABRUPT VARACTOR DIODES**  
**1N5139 - 1N5148**  
**1N5139A - 1N5148A**

PART NUMBER	CAPACITANCE @ 4 Vdc			CAPACITANCE RATIO C•4V / C•60V MIN	MIN QUALITY FACTOR Q @ 4 Vdc f = 50 MHz
	MIN	pF NOM	MAX		
1N5139	6.12	6.8	7.48	2.7	350
◆ 1N5139A	6.46	6.8	7.14	2.7	350
1N5140	9.0	10.0	11.0	2.8	300
◆ 1N5140A	9.5	10.0	10.5	2.8	300
1N5141	10.8	12.0	13.2	2.8	300
◆ 1N5141A	11.4	12.0	12.6	2.8	300
1N5142	13.5	15.0	16.5	2.8	250
◆ 1N5142A	14.3	15.0	15.7	2.8	250
1N5143	16.2	18.0	19.8	2.8	250
◆ 1N5143A	17.1	18.0	18.9	2.8	250
1N5144	19.8	22.0	24.2	3.2	200
◆ 1N5144A	20.9	22.0	23.1	3.2	200
1N5145	24.3	27.0	29.7	3.2	200
◆ 1N5145A	25.7	27.0	28.3	3.2	200
1N5146	29.7	33.0	36.3	3.2	200
◆ 1N5146A	31.4	33.0	34.6	3.2	200
1N5147	36.1	39.0	42.9	3.2	200
◆ 1N5147A	37.1	39.0	40.9	3.2	200
1N5148	42.3	47.0	51.7	3.2	200
◆ 1N5148A	44.7	47.0	49.3	3.2	200

Package Style		DO-7
DC Power Dissipation (Pd)		400 mW
Forward Current (If)		250 mA
Min Reverse Breakdown Voltage (Bvr)	@ Ir = 10 µA dc	65 Vdc
Max Reverse Current (Ir)	@ Vr = 55 Vdc	20 nA dc
Max Reverse Current (Ir2)	@ Vr = 55 Vdc; Ta = 150°C	20 µA dc
Temp Coefficient of Capacitance	@ Vr=4 Vdc; Ta -40 to +85°C	.03%/°C
Operating Temperature Range (Topr)		-65 to + 175°C
Storage Temperature Range (Tstg)		-65 to + 200°C
Voltage Tolerance:	Standard Device	±10%
	Suffix A	± 5%

◆ DENOTES MILITARY APPROVAL FOR JAN - JANTX - JANTXV