

Plastic package, Surface Mount hyperabrupt tuning varactor



PLASTIC PACKAGE, SURFACE MOUNT HYPERABRUPT TUNING VARACTOR

Description

This series of silicon tuning varactors consists of hyperabrupt epitaxial devices. They incorporate a passivated mesa technology. This family is designed for a low cost medium to high volume market that may be supplied in tape and reel for automated pick and place assembly on surface mount circuit boards.

Application

The DH76000 series hyperabrupt tuning varactor are offered in a large selection of capacitance range. They provide the highest Q factor (low reverse series resistance). Typical applications include low noise narrow and moderate frequency bandwidth applications (VCO mainly) from HF to Microwave frequencies (up to 3 GHz). Other applications are voltage tuned filters, phase shifters, delay lines...

20 Volt hyperabrupt junction varactors

Characteristics @ Ta=+25° C

Reverse breakdown voltage, Vb = 20 V min. @ 10 µA
Reverse Current, Ir = 200 nA @ 16 V

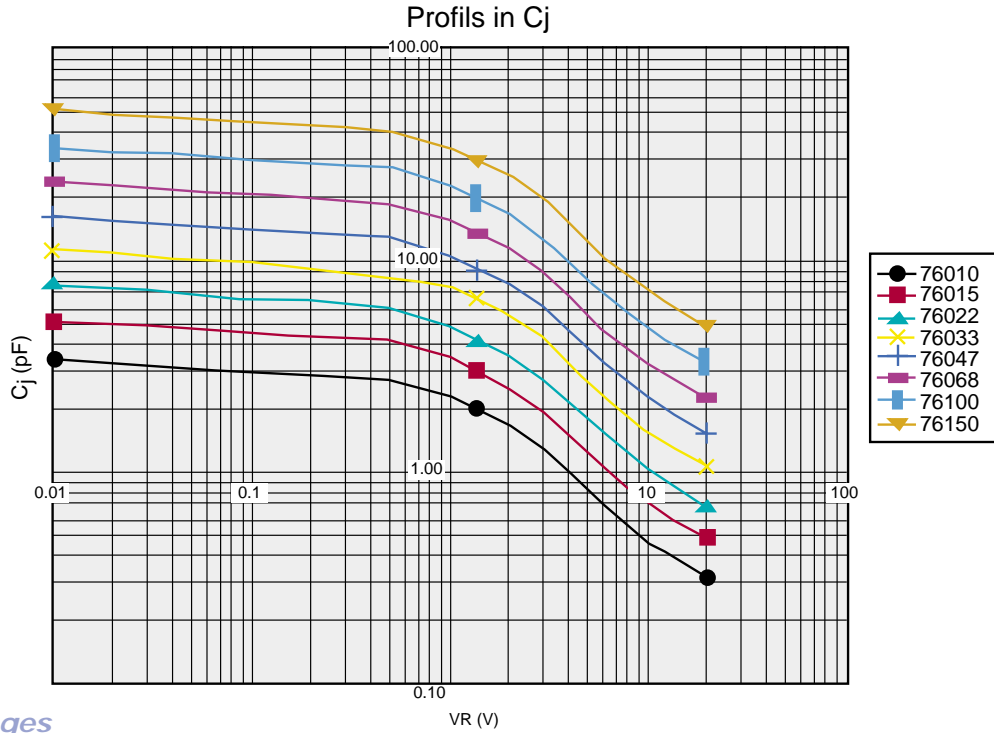
Temperature ranges:

Operating junction (Tj) : -55° C to +125° C
Storage : -55° C to +150° C

Test conditions	Total capacitance (pF) Ct				Tuning ratio	
	f = 1 MHz Vr = 1 V	f = 1 MHz Vr = 4 V	f=1 MHz Vr = 12 V	f = 1 MHz Vr = 20 V	Ct1V/Ct12V f = 1 MHz	Ct1V/Ct20V f = 1 MHz
Type	typ	±20 %	typ.	typ.	typ.	typ.
DH76010	2.5	1.2	0.6	0.5	4.1	4.9
DH76015	3.6	1.7	0.8	0.7	4.4	5.4
DH76022	5.2	2.4	1.1	0.9	4.7	5.8
DH76033	8.0	3.5	1.6	1.3	4.9	6.1
DH76047	11.0	4.9	2.2	1.7	5.0	6.4
DH76068	16.0	7.0	3.1	2.4	5.1	6.5
DH76100	23.0	10.0	4.5	3.5	5.2	6.7
DH76150	35.0	15.0	6.6	5.1	5.2	6.8

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Typical junction capacitance versus reverse voltage

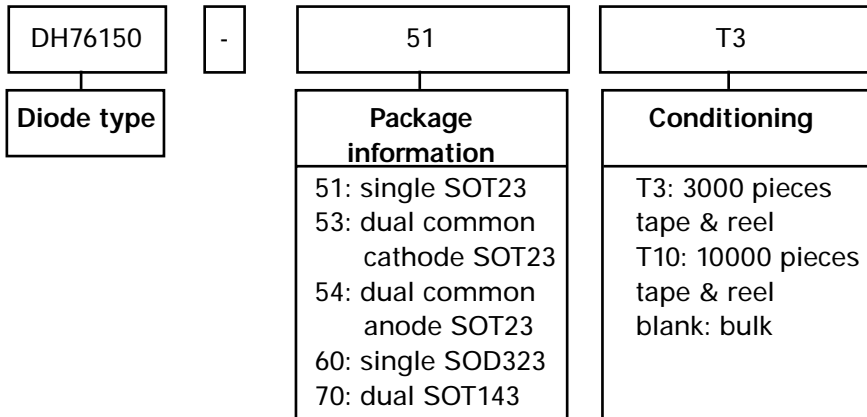


Packages

Packages	SOD323	SOT23	SOT23	SOT23	SOT143
DH76010	DH76010-60	DH76010-51	DH76010-53	DH76010-54	DH76010-70
DH76015	DH76015-60	DH76015-51	DH76015-53	DH76015-54	DH76015-70
DH76022	DH76022-60	DH76022-51	DH76022-53	DH76022-54	DH76022-70
DH76033	DH76033-60	DH76033-51	DH76033-53	DH76033-54	DH76033-70
DH76047	DH76047-60	DH76047-51	DH76047-53	DH76047-54	DH76047-70
DH76068	DH76068-60	DH76068-51	DH76068-53	DH76068-54	DH76068-70
DH76100	DH76100-60	DH76100-51	DH76100-53	DH76100-54	DH76100-70
DH76150	DH76150-60	DH76150-51	DH76150-53	DH76150-54	DH76150-70

(1) Other configuration available on request.

How to order?



TUNING VARACTOR



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