

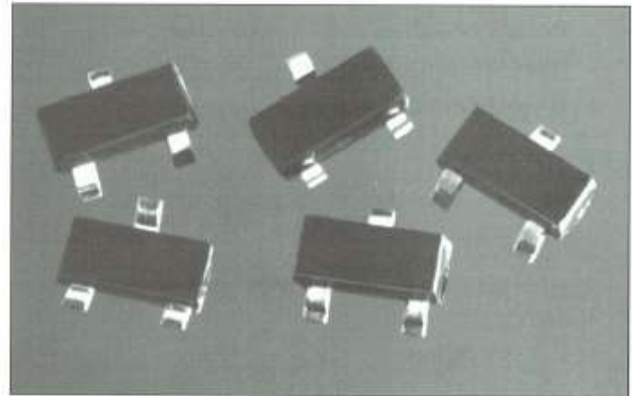
SOT-23 SURFACE MOUNT HIGH Q ABRUPT JUNCTION VARACTORS

FEATURES

- Silicon Mesa Geometry
- High Reliability Dense SiO₂ Passivation
- Highest Q Available
- Mil Spec Performance/Economy Price
- Typical $\sigma = 43$

APPLICATIONS

- Lowest ϕ Noise VCO's
- Moderate Bandwidth VCO's
- PLL VCO's
- VVF's



DESCRIPTION

The GC1500-23 series varactors are silicon abrupt junction devices. They provide the highest Q and lowest series resistance available in a 30 volt silicon device. They are ideal for narrow to moderate frequency bandwidth applications, and are available in values suitable for VHF

through 1500 MHz. The economical SOT-23 package is ideal for commercial surface mount construction and is available in single (23-0) and common cathode (23-4) configurations. Some limitations apply, consult factory for availability.

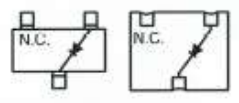
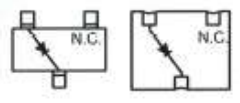
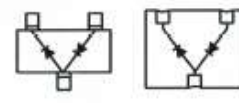
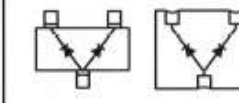
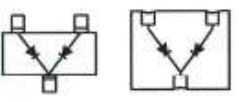
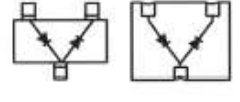
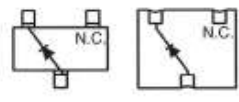
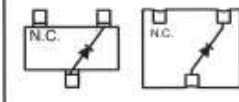
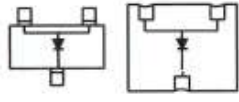
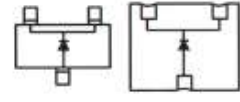
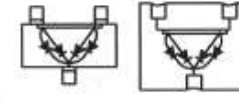
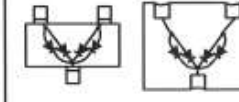
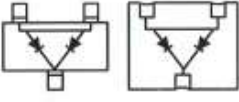
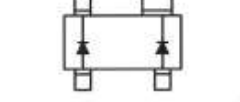
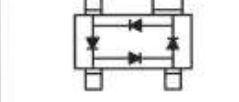
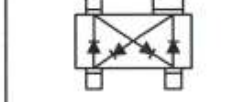
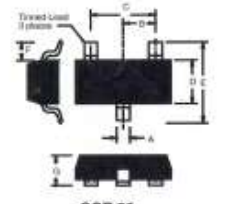
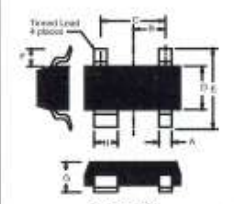
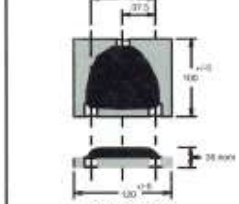
LORAL SOT-23 ABRUPT VARACTORS (30V) FOR 0 - 30V MODERATE BANDWIDTH/LOW NOISE VCO'S

P/N	C _{T4} (pF±10%)	C _{T0} / C _{T30} (MIN)	Q (MIN/4V/50MHz)
GC 1502	1.2	3.4	3200
GC 1503	1.5	3.5	3000
GC 1504	1.8	3.5	3000
GC 1505	2.2	3.7	3000
GC 1506	2.7	3.7	2500
GC 1507	3.3	3.8	2500
GC 1508	3.9	3.9	2500
GC 1509	4.7	3.9	2000
GC 1510	5.6	4.0	2000
GC 1511	6.8	4.0	2000
GC 1512	8.2	4.0	2000
GC 1513	10	4.1	2000
GC 1514	12	4.1	2000
GC 1515	15	4.2	1500
GC 1516	18	4.2	1500
GC 1517	22	4.2	1500

See Page 14 for Available Package Configurations.

LORAL

SURFACE MOUNT PACKAGE CONFIGURATIONS - FOR SOT AND EPSM TYPE PACKAGES

<p>Single Right</p>  <p>SOT 23-0 154-0</p>	<p>Single Left</p>  <p>SOT 23-1 154-1</p>	<p>Series 'Tee' Left</p>  <p>SOT 23-2 154-2</p>	<p>Common Anode</p>  <p>SOT 23-3 154-3</p>																																				
<p>Common Cathode</p>  <p>SOT 23-4 154-4</p>	<p>Series 'Tee' Right</p>  <p>SOT 23-5 154-5</p>	<p>Single Reverse Left</p>  <p>SOT 23-6 154-6</p>	<p>Single Reverse Right</p>  <p>SOT 23-7 154-7</p>																																				
<p>Dual Anode</p>  <p>SOT 23-8 154-8</p>	<p>Dual Cathode</p>  <p>SOT 23-9 154-9</p>	<p>Double Parallel Pair</p>  <p>SOT 23-10 154-10</p>	<p>Double Common Cathode</p>  <p>SOT 23-11 154-11</p>																																				
<p>Parallel Pair</p>  <p>SOT 23-12 154-12</p>	<p>Unconnected Pair</p>  <p>SOT 143-5</p>	<p>Ring Quad</p>  <p>SOT 143-6</p>	<p>Crossover Quad</p>  <p>SOT 143-7</p>																																				
 <p>SOT 23</p>	<table border="1"> <thead> <tr> <th>Dim</th> <th>Min</th> <th>Typ</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>15</td> <td>17</td> <td>21</td> </tr> <tr> <td>B</td> <td>35</td> <td>37.5</td> <td>40</td> </tr> <tr> <td>C</td> <td>70</td> <td>75</td> <td>80</td> </tr> <tr> <td>D</td> <td>45</td> <td>50</td> <td>55</td> </tr> <tr> <td>E</td> <td>-</td> <td>100</td> <td>-</td> </tr> <tr> <td>F</td> <td>18</td> <td>23</td> <td>27</td> </tr> <tr> <td>G</td> <td>-</td> <td>75</td> <td>80</td> </tr> <tr> <td>H</td> <td>31</td> <td>33</td> <td>36</td> </tr> </tbody> </table> <p>Dimensions in Mils.</p>	Dim	Min	Typ	Max	A	15	17	21	B	35	37.5	40	C	70	75	80	D	45	50	55	E	-	100	-	F	18	23	27	G	-	75	80	H	31	33	36	 <p>SOT 143</p>	 <p>154 (EPSM)</p>
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Note: Some limitations apply - Consult factory for details

LORAL

Microwave - FSI

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