I & Q MODULATOR
MODEL: SMP-2060

WIDE BANDWIDTH
100 - 1000 MHz

FEATURES:
► Compact Size
► Good Rejection

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier Frequency</td>
<td>100 - 1000 MHz</td>
</tr>
<tr>
<td>Carrier Power Level (LO)</td>
<td>+10 dBm</td>
</tr>
</tbody>
</table>
| Conversion Loss                | Freq. (MHz) dB (Typ. / Max.)  
  200 - 600                     | 7.0 / 9.5 |
  100 - 1000                    | 9.5 / 11 |
| Modulation Frequency           | DC - 150 MHz |
| Input IP3                      | 15 dBm (Typ.) |
| SSB Rejection                  | Freq. (MHz) dB (Typ. / Min.)  
  200 - 600                     | 20 / 15 |
  100 - 1000                    | 17 / 13 |
| Isolation                      | LO/RF 35 dB (Min.)  
                             | LO/IF 20 dB (Min.) |
| Impedance                      | 50 Ohms (Nom.) |
| Operating Temperature Range    | -40 to +85 °C |

Notes:
1. USB is suppressed when MOD1 is +90° w/ resp. to MOD2
2. LSB is suppressed when MOD1 is -90° w/ resp. to MOD2
3. Conversion loss is the difference between the combined power of both modulation inputs and desired output.

Package # 151

PIN CONFIGURATION

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Output</th>
<th>MOD1</th>
<th>MOD2</th>
<th>Case GND</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4, 5</td>
</tr>
</tbody>
</table>

FUNCTIONAL DIAGRAM
I & Q MODULATOR
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WIDE BANDWIDTH 100 - 1000 MHz

PERFORMANCE PLOTS

- Conversion Loss (dB) vs. Frequency (MHz)
- Carrier Rejection (dB) vs. Frequency (MHz)
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PERFORMANCE PLOTS