PMI MODEL P1T-500M40G-55-T-292FF-75DB IS AN ABSORPTIVE, HIGH SPEED, SINGLE POLE SINGLE THROW SWITCH CAPABLE OF SWITCHING WITHIN 100 ns. THE FREQUENCY RANGE IS 500 MHz TO 40 GHz. THIS SWITCH HAS > 75 dB ISOLATION.

April 03, 2017

Designed By:
Matthew Berry / Sebastian Palacio / Narayanaswamy Shanmugam

Tested & Reported By:
Sebastián Palacio / Alfredo López
Typical Characteristics
On
P1T-500M40G-55-T-292FF-75DB

DESCRIPTION
PMI MODEL P1T-500M40G-55-T-292FF-75DB IS AN ABSORPTIVE, HIGH SPEED, SINGLE POLE SINGLE THROW SWITCH CAPABLE OF SWITCHING WITHIN 100 ns. THE FREQUENCY RANGE IS 500 MHz TO 40 GHz. THIS SWITCH HAS > 75 dB ISOLATION.

SPECIFICATIONS
- FREQUENCY RANGE: 500 MHz TO 40 GHz
- ISOLATION: 75 dB MIN
- INSERTION LOSS: 6.5 dB MAX
- VSWR IN / OUT: 2.5:1 TYP
- INPUT POWER: -20 dBm CW MAX
- RF SWITCHING SPEED: 100 ns MAX (10% TO 90% RF)
- DC VOLTAGE: ±5 V
- CONTROL SIGNAL: TTL COMPATIBLE
- CONNECTORS IN/OUT: 0.020" (1.0" X (W) 1.0" X (H) 0.5"
- SIZE: PAINTED BLUE

ENVIRONMENTAL RATINGS
- TEMPERATURE: -40°C TO +85°C (OPERATING)
- -55°C TO +125°C (STORAGE)

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE ON REVISON

MECHANICAL OUTLINE

PLANAR MONOLITHICS INDUSTRIES, INC.
7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TELEPHONE (301)662-5019 FAX (301)662-1731
WEBSITE www.pmi-rf.com
E-MAIL sales@pmi-rf.com
ISO 9001 CERTIFIED

PRODUCT FEATURE
P1T-500M40G-55-T-292FF-75DB

7311-F Grove Road, Frederick, MD 21704 USA  Phone: (301)662-5019  Fax: (301)662-1731  
email: sales@pmi-rf.com
## Typical Characteristics

On
P1T-500M40G-55-T-292FF-75DB

### Typical Data @ 25°C

<table>
<thead>
<tr>
<th>TEST. ITEM NO</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>TEST RESULTS</th>
<th>QA QC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range:</td>
<td>500 MHz to 40 GHz</td>
<td>500 MHz to 40 GHz See Plots</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Isolation:</td>
<td>75 dB Min.</td>
<td>80 dB See Plot</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Insertion Loss:</td>
<td>6.00 dB Max.</td>
<td>6.00 dB See Plot</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>VSWR: (In/Out)</td>
<td>2.5:1 Typ.</td>
<td>1.92:1 See Plot</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Input Power:</td>
<td>+20dBm CW Max.</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>RF Switching Speed: (10% to 90% RF)</td>
<td>100ns Max.</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>DC Voltage:</td>
<td>±5V</td>
<td>±5V</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Control Signal:</td>
<td>TTL Compatible</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>

QA/QC Approval: ___________________________     Date: ___________________________
Typical Characteristics
On
P1T-500M40G-55-T-292FF-75DB

J0 – J2 Insertion Loss, Return Loss
Isolation