

## TSA-23T48G-04

### Ultra-wideband Tapered Slot Antenna Array

#### Description

The TSA-23T48G-04 is an ultra-wideband tapered slot antenna array. This antenna array utilizes our company's patented ultra-wideband balun, which enables low-cost implementation. This antenna covers the frequency range of 23 to 48 GHz with high gain and low sidelobes. Tapered slot antenna arrays capable of producing customer-specific gain and bandwidth are also available.



#### Applications

- ✓ Phased-array System
- ✓ Communication Systems
- ✓ Sensor Sub-assemblies
- ✓ Radiometers

#### Features

- ✓ 4 element antenna array
- ✓ Fermi-tapered slot antenna with corrugation
- ✓ Ultra-Wideband
- ✓ High Gain
- ✓ Low Sidelobes
- ✓ Low VSWR
- ✓ Size: 47 x 62 mm

#### Electrical Specifications

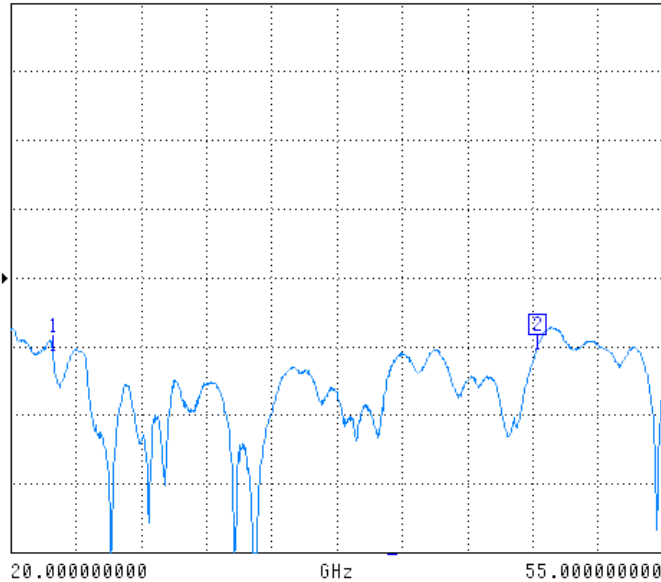
Parameter	Units	Min.	Typ.	Max.
Frequency Range	GHz	23	-	48
Gain	dBi	16	17	18
Beamwidth	deg	9	11	13
Sidelobe Level	dBc	10	13	16

## Ultra-wideband Tapered Slot Antenna Array

### Return Loss

S11 FORWARD REFLECTION

LOG MAGNITUDE REF=0.000 dB 10.000 dB/DIV



CH 1 - S11  
0.0000 mm REF  
0.000 dB OFFSET  
0.00° OFFSET

▶ MARKER 2  
48.262500000 GHz  
-10.360 dB

MARKER TO MAX  
MARKER TO MIN

1 22.275000000 GHz  
-10.608 dB

MARKER READOUT  
FUNCTIONS

### Radiation Pattern at 35 GHz (E-plane)

