

## Waveguide Terminations QWN/QTW/QTZ

#### **Characteristics**

- **♦ Low VSWR**
- **♦ Compact Size**
- ◆ Full Waveguide Bandwidths
- Available for High Power up to 300 watts CW Applications



#### **Product Description**

QuinStar Technology offers a broad line of waveguide terminations in a variety of shapes and style, wide range of power handling capacities and cooling methods to suit both typical and special applications. The QWN series Standard Waveguide Terminations consist of an RF-absorbing matched load mounted in a short length of flanged waveguide. These standard terminations, offered in the K through G waveguide bands can dissipate 1 to 5 Watts of power depending on the specific band. They also present a low VSWR over the full waveguide band.

The QTW series High Power Terminations are produced with standard waveguide flange interface from 12.4 to 220 GHz in Ku through G bands. The termination consists of a short length of waveguide and an integral matched terminal load. Individual resistive dielectric loads are

tapered to precise wedge configurations for maximum effective power absorption The gradual taper ensures a low VSWR over the full waveguide band. These loads have the capacity to absorb from 100 Watts to 300 Watts of power depending on the frequency band.

Series QTZ Custom High Power Terminations are available with custom form factors and features for radar and other high power transmitter applications. These terminations are specially designed and manufactured to meet the customer's mechanical and electrical requirements, and may incorporate convection cooling, active forced-air cooling or liquid cooling to dissipate the heat generated from power absorption. They are available within the C to Ku-bands, with power handling capacities up to 4 kW CW.

#### **Specifications**

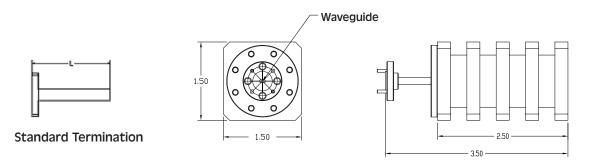
SERIES QWN STANDARD TERMINATIONS													
WAVEGUIDE BAND	K	K Ka			U	1		E		W	F	D	G
Frequency Range (GHz)	18-26.5	26.5-40	0 33-5	0	40-60	50-	0-75 6		)-90	75-110	90-140	110-170	140-220
Waveguide Size	WR-42	WR-28	3 WR-2	22	WR-19	WR	/R-15 V		R-12	WR-10	WR-8	WR-6	WR-5
VSWR (max.)	1.03:1	1.03:1	1.04	:1	1.05:1	1.0	5:1	1.0	06:1	1.06:1	1.08:1	1.1:1	1.12:1
Power Handling (W)	5	5	4		4	3	}	3		3	3	1	1
Length (in/mm)	3.31/84.0	2.81/71	.3 2.56/6	5.0 2	2.56/65.0	1.56	/39.6	1.56	5/39.6	1.56/39.6	0.9/22.8	0.90/22.8	0.9/22.8
SERIES QTW HIGH POWER TERMINATIONS													
WAVEGUIDE BAND	Ku	K	Ka	Q	) (	J	V		E	W	F	D	G
Frequency Band (GHz)	12.4-18	18-26.5	26.5-40	33-	50 40	-60	50-7	75	60-90	75-110	90-140	110-170	140-220
VSWR Max.	1.10:1	1.10:1	1.10:1	1.10	0:1 1.1	0:1	1.10	:1	1.10:	1.10:1	1.15:1	1.15:1	1.15:1
Average Power (Watts)	300	250	250	25	50 2!	50	200	0	200	200	200	100	100



# **Waveguide Terminations**

QWN/QTW/QTZ

#### **Outline Drawings/Mechanical Specifications**



**High Power Termination** 

### **Ordering Information**

