



- Low Loss
- High Power Handling
- Phase & Amplitude Stable
- Low Outgassing
- Multipaction Resistant (Vented Connectors)

Times Microwave Systems provides a wide variety of customized cable assemblies for Thermal Vacuum Test that meets with the below critical requirements:

### Outgassing

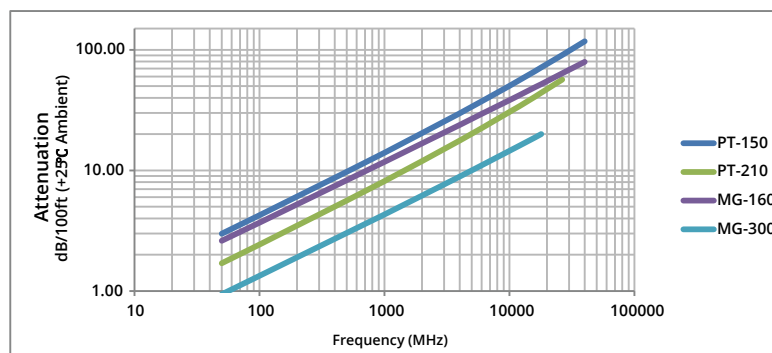
Cable assemblies must utilize low outgassing materials in a vacuum environment. It is imperative that non-polymeric materials are used in the cable assembly. TMS (Times Microwave Systems) proprietary material conditioning and vacuum testing of assemblies ensures outgassing is minimized in space flight and thermal vacuum rated test cable assemblies. All TMS assemblies meet the NASA standards outlined in ASTM E-595 for outgassing characteristics.

### Multipaction

A multipactor discharge can vaporize some of the dielectric material within the coaxial line and create ionized gas particles. If the coaxial line is not properly vented, these collected gas particles can initiate an ionization breakdown within the structure. This condition can cause catastrophic electrical failure of the cable assembly. In many cases, the use of overlapping interface dielectrics will also help to minimize this condition from occurring. TMS offers most major connector interfaces, SMA, TNC, 2.92mm types for associated cable groups.

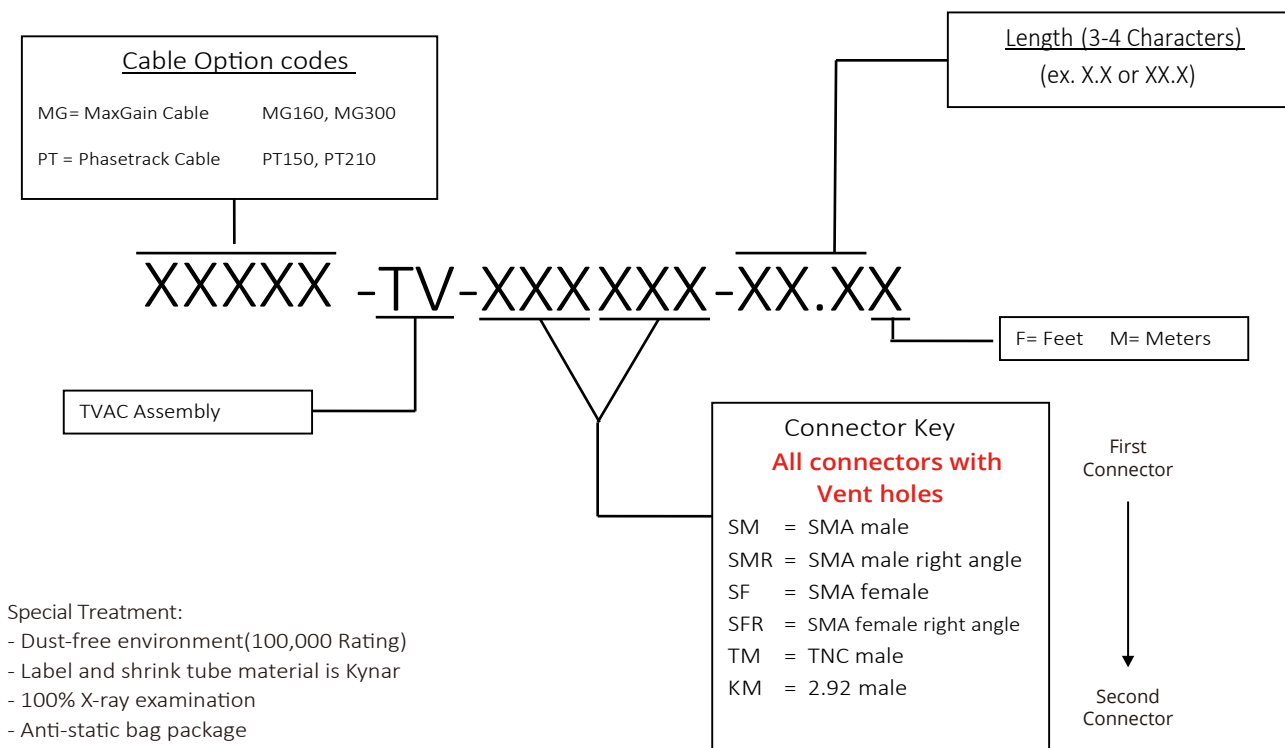
### Phase Critical

PhaseTrack® is designed for applications demanding minimal phase change over temperature. All PhaseTrack® cables use proprietary TF4™ dielectric that does not have the abrupt shift in the phase (phase knee) that occurs with solid or tape wrapped PTFE based products under normal room ambient temperature conditions.



Part Number	PT-150	PT-210	MG-160	MG-300
Diameter (in)	0.145	0.220	0.156	0.302
Weight (lbs/1000ft)	24.0	46.0	26.0	93.0
Temperature Rating	-55 to 150 C		-65 to 150°C	
Minumum Bend Radius (in)	0.75	1.125	0.75	1.75
Loss @ 3 GHz (dB/100ft)	27.90	17.60	20.60	7.64
Loss @ 18 GHz (dB/100ft)	78.50	53.30	52.01	-
Loss @ 40 GHz (dB/100ft)	-	-	79.47	-
Connectors Available	SM/SMR SF/SFR	SM/SMR TM	KM	TM

## TVAC Ordering Information



### World Headquarters:

358 Hall Avenue, Wallingford, CT 06492 Fax: 203-949-8423

Tel: 203-949-8400, 1-800-867-2629 International: 203-949-8503



### China Sales:

TMC Building 4, No. 318 Yuanshan Road, Xinzhuang Industrial Park, Shanghai, China 201108 Tel: 86-21-5176-1209 Fax: 86-21-64424098