

Engineered Products:

FBT™-600

Flexible Low Loss High Power Communications Coax

Ideal for...

- High Power Base Station Jumper Assemblies
- In-Building Plenum Feeder Runs
- Any High Power Low Loss RF cable application



- **FBT**[™] is an indoor/outdoor highly fire retardant cable intended specifically for runs within and between base station cabinets. It is also applicable for return air handling plenums (e.g., dropped ceilings, raised floors). It has a UL/NEC & CSA rating of 'CL2P' and 'FT6' respectively.
- **Flexibility** and bendability are hallmarks of the FBT-600 cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.
- Low Loss is another hallmark feature of FBT-600. Size for size FBT has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.
- **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. > 180 dB between two adjacent cables).
- Weatherability: FBT-600 cables designed for outdoor exposure incorporate FEP jackets for UV resistance and have life expectancy in excess of 20 years.
- Connectors: A wide variety of connectors are available for FBT-600 cable, including all common interface types, reverse polarity, and a choice of solder or non-solder center pins. Most FBT connectors employ crimp outer attachment using standard hex crimp sizes.
- Cable Assemblies All FBT-600 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

Part Description			Stock	
Part Number	Application	Jacket	Color	Code
FBT-600	Indoor/Outdoor	FEP	Brown	54173

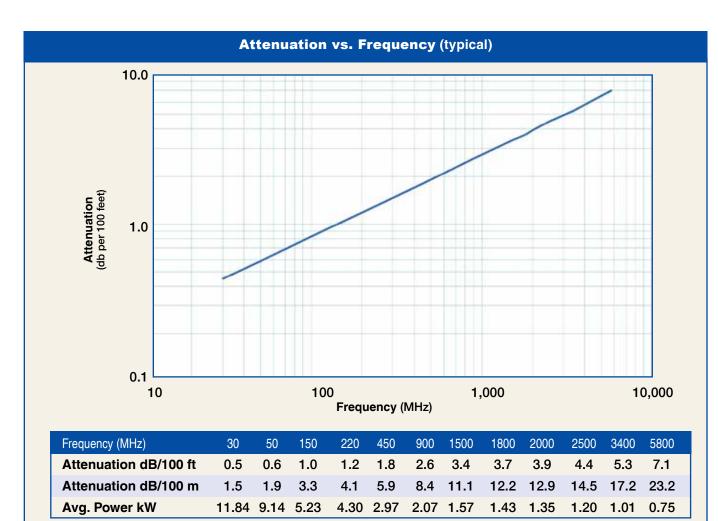
Construction Specifications					
Description	Material	ln.	(mm)		
Inner Conductor	Solid BCCAI	0.150	(3.81)		
Dielectric	Low Density PTFE	0.455	(11.56)		
Outer Conductor	Aluminum Tape	0.461	(11.71)		
Overall Braid	Tinned Copper	0.490	(12.45)		
Jacket	Brown FEP	0.565	(14.38)		

Mechanical Specifications				
Performance Property	Units	US	(metric)	
Bend Radius: installation	in. (mm)	2.8	(69.9)	
Bend Radius: repeated	in. (mm)	6	(152.4)	
Bending Moment	ft-lb (N-m)	2.75	(3.73)	
Weight	lb/ft (kg/m)	0.210	(0.31)	
Tensile Strength	lb (kg)	265	(120.3)	
Flat Plate Crush	lb/in. (kg/mm)	210	(3.75)	

Environmental Specifications				
Performance Property	°F	°C		
Installation Temperature Range	-67/+302	-55/+150		
Storage Temperature Range	-67/+302	-55/+150		
Operating Temperature Range	-67/+302	-55/+150		



Electrical Specifications				
Performance Property	Units	US	(metric)	
Velocity of Propagation	า %	76		
Dielectric Constant	NA	1.73		
Time Delay	nS/ft (nS/m)	1.34	(4.40)	
Impedance	ohms	50		
Capacitance	pF/ft (pF/m)	26.7	(87.6)	
Inductance	uH/ft (uH/m)	0.067	(0.22)	
Shielding Effectiveness DC Resistance	dB	>90		
Inner Conductor	ohms/1000ft (/km)	0.73	(2.4)	
Outer Conductor	ohms/1000ft (/km)	1.20	(3.9)	
Voltage Withstand	Volts DC	4000		
Jacket Spark	Volts RMS	8000		
Peak Power	kW	40		



FINES MICROWAYE

Calculate Attenuation =

(0.081389) • √FMHz + (0.000146) • FMHz (interactive calculator available at http://www.timesmicrowave.com/cable_calculators) Attenuation:

VSWR=1.0; Ambient = +25°C (77°F)

Power:

VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F); Sea Level; dry air; atmospheric pressure; no solar loading



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Install Tools

Туре	Part Number	Stock Code	Description
Crimp Tool	HX-4	3190-200	Crimp Handle
Crimp Dies	Y1720	3190-203	.610" Hex Dies
Crimp Rings	CR-600	3190-831	Crimp Rings for TC/EZ-600 connectors (pkg of 10)
Deburr Tool	DBT-U	3192-001	Removes center conductor rough edges
Midspan Strip Too	I GST-600A	3190-1051	For ground strap attachment
Cutting Tool	CCT-01	3190-1544	Cable end flush cut tool
Replacement Blac	le RB-01	3190-1609	Replacement blade for cutting tool