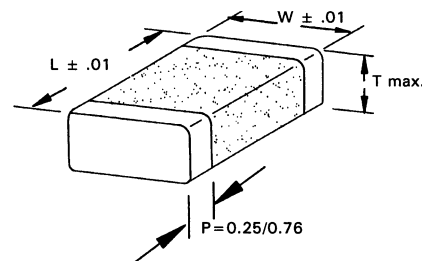


## FEATURES

- Telco Capacitor. This type exclusively for Tip & Ring and ring detection circuits as STD Telecom filter to block - 48VDC telephone line voltage and pass subscribers AC signal (15Hz ~ 25Hz, 70Vrms ~ 90Vrms).
- Save board space.
- Surface Mount (EIA Sizes) packages.
- Low ESR.
- Wide band operation, excellent high frequency Telecom filtering.
- Available in X7R.



## PART NUMBERING

Part Number Example: CMT-300/105KX1825TF									
CMT	-	300	/	105	K	X	1825	T	F
Type		Rated DC Voltage		Capacitance Code (pF)*	Tolerance Code	Dielectric Material**	Case Size	Package Code***	RoHs Compliant
* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).									
** Dielectric Material: X = X7R.									
*** Package Code: T = 7" Tape & Reel, T13 = 13" Tape & Reel, W = Waffle.									

## SPECIFICATIONS

Performance Characteristics	
Operating Temperature Range	-55°C ~ +125°C (X7R).
Temperature Characteristics	±15% @ 0VDC.
Voltage Range	250VDC & 300VDC (Telco rating)
Withstanding Voltage (between leads)	2.0 times rated voltage for 5 seconds ± 1 second, 50mA maximum.
Capacitance Range (1KHz)	Measured @ 1Vrms.
Capacitance Tolerance	±10% & ±20% (X7R).
Maximum Dissipation Factor % (25°C, 1KHz)	2.5 @ 1Vrms (X7R).
Minimum Insulation Resistance (25°C)	10GΩ or 500MΩ x μF, whichever is less, measured @ rated voltage (X7R).
Aging Rate	2.5% per decade.

TIP AND RING SELECTION GUIDE

EIA	WVDC	Cap.	T.C.	THK
L = 0.079" W = 0.049" ± 0.012" <b>0805</b>	250	270pF	X7R	1.0 ±0.1
		330pF		
		470pF		
		680pF		
		.001uF		
		.0015uF		
		.0018uF		
		.0022uF		
		.0033uF		
		.0047uF		
		.0056uF		
		.0068uF		
		.01uF		
		.015uF		
		.022uF		
		.027uF		
		.039uF		
		.047uF		
		.047uF		

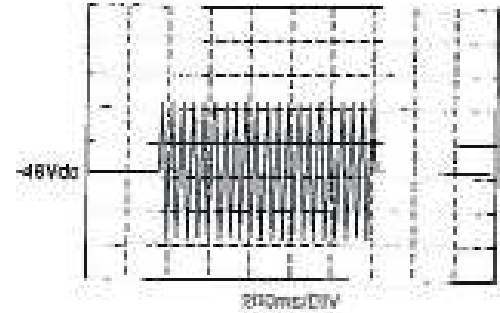
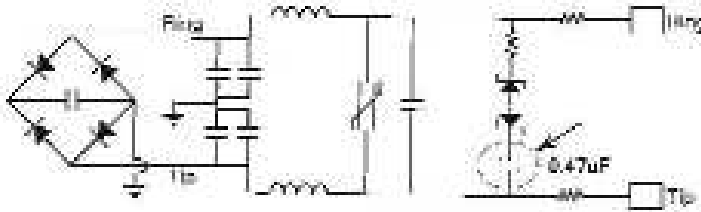
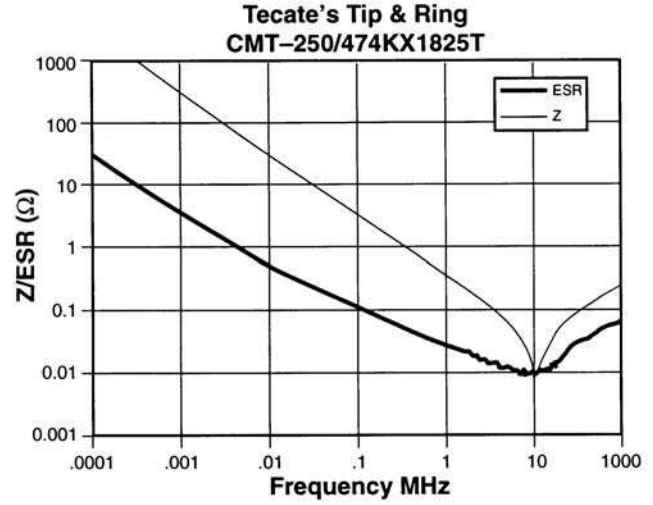
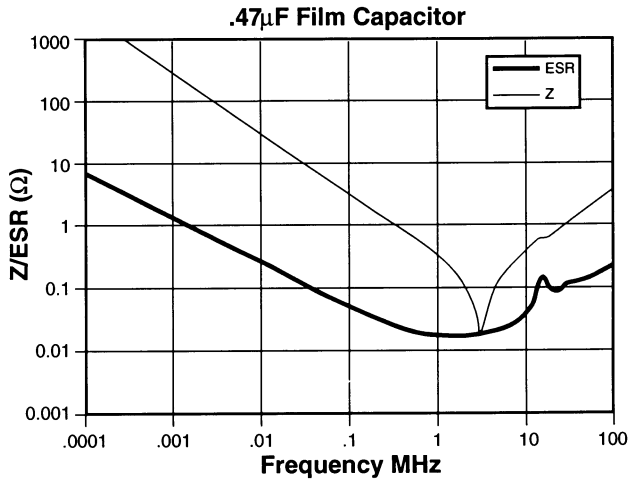
L = 0.126" W = 0.063" ± 0.012" <b>1206</b>	250	180pF	X7R	1.0 ±0.1
		220pF		
		270pF		
		330pF		
		470pF		
		680pF		
		.001uF		
		.0015uF		
		.0018uF		
		.0022uF		
		.0033uF		
		.0047uF		
		.0056uF		
		.0068uF		
		.01uF		
		.015uF		
		.022uF		
		.027uF		
		.033uF		
		.039uF		
		.047uF		
		.056uF		1.25±0.15
		.068uF		
		.082uF		1.6 ±0.2
		0.1uF		

EIA	WVDC	Cap. uF	T.C.	THK
L = 0.126" W = 0.098" ± 0.008" <b>1210</b>	250	.01	X7R	1.25 ±0.15
		.015		
		.022		
		.027		
		.033		
		.039		
		.047		
		.056		
		.068		
		.082		
		0.10		
		0.15		
		0.22		

L = .177" W = .126" ± 0.012" <b>1812</b>	250	.01	X7R	1.25 ±0.15			
		.015					
		.022					
		.027					
		.033					
		.039					
		.047					
		.056					
		.068					
		.082					
		0.10					
		0.15					
		0.22					
		0.33					
		0.47					
					0.56		1.6 ±0.2
					0.68		
		0.82		2±0.2			
		1.0		2.4±0.2			
	300	.047		1.6±0.2			

L = .177" W = .252" ± 0.012" <b>1825</b>	250	1.0	X7R	1.6±0.2
	300	1.0		2±0.2

L = 0.220" W = 0.200" ± 0.012" <b>2220</b>	250	.82	X7R	2±0.2
		1.0		
		1.5		
				2.2



**Temperature Coefficient  
.47 $\mu$ F 250V  
Film vs Tip & Ring Ceramic**

