**MLC Discoidal Chip** 

**Feed-Through Capacitors** 



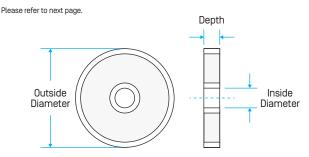
## **Discoidals**

- Designed to meet or exceed all the requirements of MIL-PRF-15733, MIL-PRF-28861 and MILPRF-31033
- Multilayer construction with through hole mounting
- Low impedance to ground resulting in optimum EMI suppression
- High frequency performance
- Ultra-low ESR
- Chassis or bulkhead mounted, either individually or in a cylindrical can, provides excellent isolation of the input signal from the output of the capacitor or filter
- High capacitance density
- Wide Voltage Range: 25V-3000V
- Suitable for High Voltage Applications in power supplies, lighting systems and high voltage circuits
- Temperature Stability
- Broad Range of Capacitance Values 10pF-7.2µF
- Size 0502-6429
- Dielectric NPO, X7R
- RoHS compliant

Discoidal feed-through capacitors using multilayer construction exhibit very low impedance to ground, resulting in optimum EMI suppression.

The alternate-layered construction provides very low series resistance and series inductance, which allows for low impedance at high frequencies.

## **Dimensions**





Quantic™ UTC is a global capacitor provider manufacturing multilayer ceramic capacitors (MLCCs) and leaded devices for use in defense, aerospace, computer, telecommunications, industrial and various high reliability applications. Our offerings include surface mount (SMT) multi-layer ceramic chips capacitors in both custom and EIA standard sizes; switch mode power supply (SMPS) capacitors in accordance with MIL-PRF-49470 and DSCC/DLA 87106, 88011 drawings and customer source controlled drawings (SCDs); SMT high voltage MLCC; radial leaded high voltage capacitors; SMD large body size MLCC; discoidal capacitors; discoidal arrays; and custom molded case radial parts.

		0502	0703	0904	1404	2105	2705	3505	3905	6006	
Outside Diameter		0.050 ±0.004	0.070 ±0.004	0.095 ±0.005	0.145 ±0.010	0.210 ±0.010	0.270 ±0.010	0.345 ±0.010	0.390 ±0.010	0.600 ±0.015	
Inside Diameter		0.020 ±0.004	0.030 ±0.004	0.038 ±0.004	0.038 ±0.004	0.050 ±0.005	0.050 ±0.004	0.050 ±0.004	0.050 ±0.005	0.060 ±0.005	
Depth		0.035	0.035	0.060	0.060	0.080	0.100	0.100	0.120	0.150	
TC	WVDC	Maximum Capacitance Available									
	50V	470pF	820pF	2,700pF	10,000pF	47,000pF	0.1uF	0.22uF	0.27uF	.360uF	
NP0	100V	390pF	680pF	2,200pF	9,100pF	39,000pF	0.091uF	0.18uF	0.22uF	.330uF	
	200V	330pF	560pF	1,800pF	8,200pF	33,000pF	0.082uF	0.15uF	0.18uF	.270uF	
	500V	270pF	470pF	1,500pF	6,600pF	27,000pF	0.068uF	0.12uF	0.15uF	.220uF	
	50V	10,000pF	15,000pF	50,000pF	0.022uF	0.91uF	2.2uF	4.2uF	4.5uF	7.20uF	
X7R	100V	10,000pF	15,000pF	47,000pF	0.02uF	0.82uF	2.0uF	3.9uF	4.2uF	6.80uF	
	200 V	4,700pF	10,000pF	33,000pF	0.15uF	0.56uF	1.2uF	2.7uF	3.3uF	4.70uF	
	500V	2,200pF	8,000pF	22,000pF	0.01uF	0.39uF	1.0uF	2.2uF	2.5uF	3.30uF	

**Custom Sizes Available** with outside diameters >0.050" and special inside diameters. Contact the factory for other variations that include size, voltage, and terminations.

## **Part Ordering**

D		G	3505	X7R	1	05		V		Р	
Discoidal	Working Voltage		Physical Size	Temperature Characteristic	Capacitance Code		Tolerance		Termination		
	Voltage			Dielectric	Capacitance			Tolerance		Termination	
	L	25V		X7R	R05	0.05pF	J	[+/-] 5%	Р	Platinum Silver	
	G	50V		NPO	0R2	0.20pF	K	[+/-] 10%	G	Gold Over Nickel	
	В	100V			1R0	1.0pF	М	[+/-] 20%			
	R	200V			2R7	2.7pF	V	[+/-] GMV			
	Н	250V			270	27pF	Z	+80% / -20%			
	S	500V			271	270pF	Р	+100% / -0%			
	K	630V			103	10000pF	S	-0% / +30%			
	T	1000V									
	W	2000V									
	Χ	3000V									



Quantic<sup>™</sup> UTC is a global capacitor provider manufacturing multilayer ceramic capacitors (MLCCs) and leaded devices for use in defense, aerospace, computer, telecommunications, industrial and various high reliability applications. Our offerings include surface mount (SMT) multi-layer ceramic chips capacitors in both custom and EIA standard sizes; switch mode power supply (SMPS) capacitors in accordance with MIL-PRF-49470 and DSCC/DLA 87106, 88011 drawings and customer source controlled drawings (SCDs); SMT high voltage MLCC; radial leaded high voltage capacitors; SMD large body size MLCC; discoidal capacitors; discoidal arrays; and custom molded case radial parts.