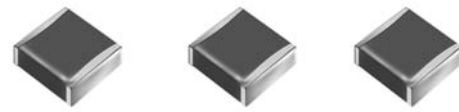


7676C (.760 x .760)



◆ Product Features

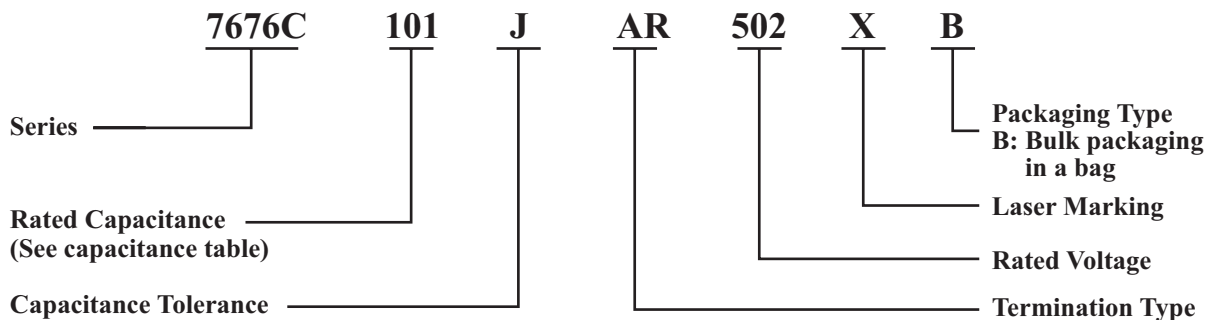
High Q, High RF Current/Voltage, High RF Power, Low ESR/ESL, Low Noise, Ultra- Stable Performance.

◆ 7676C Capacitance Table

Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC		
1.0	1R0	B,C,D	5000V code 502, Extended voltage 8000V	33	330	F,G,J, K,M	5000V code 502, Extended voltage 8000V	820	821	F,G,J, K,M	2000V code 302, Extended voltage 5000V		
1.2	1R2			39	390			1000	102				
1.5	1R5			47	470			1200	122				
1.8	1R8			56	560			1500	152				
2.2	2R2			68	680			1800	182				
2.7	2R7			82	820			2200	222				
3.3	3R3			100	101			2700	272			2000V code 202, Extended voltage 5000V	
3.9	3R9			120	121			3300	332				
4.7	4R7			150	151			4700	472			3000V code 302, Extended voltage 5000V	
5.6	5R6			180	181			5100	512				
6.8	6R8			220	221			5600	562				1000V code 102, Extended voltage 3000V
8.2	8R2			270	271			6800	682				
10	100	300	331	7500	752								
12	120	390	391	8200	822								
15	150	F,G,J, K,M	3000V code 302, Extended voltage 5000V	470	471	10000	103						
18	180			560	561								
22	220			680	681								
27	270												

Remark: special capacitance, tolerance and WVDC are available, consult with PASSIVE PLUS.

◆ Part Numbering



Capacitance Tolerance							
Code	B	C	D	F	G	J	K
Tolerance	± 0.1pF	± 0.25pF	± 0.5pF	± 1%	± 2%	± 5%	± 10%

◆7676C Lead Type and Dimensions

unit: inch(millimeter)

Series	Term. Code	Type/Outlines	Capacitor Dimensions			Overlap and Lead Dimensions				Overlap and Lead Material						
			Length (L _c)	Width (W _c)	Thickness (T _c)	Overlap (B)	Length (L _L)	Width (W _L)	Thickness (T _L)							
7676C	W	Chip	.760 +.015~ -.010 (19.3 ±0.25)	.760 ±.01 (19.3 ±0.25)	.154 ±.008 (3.90 ±0.20)	.063 (1.60) max	—	—	—	Nickel, Plated 100% Sn (RoHS)						
7676C	MS	Microstrip				.787 (20.00) min	.591 ±.01 (15.0 ±0.25)	.008 ±.001 (0.20 ±0.025)	—		—	—	Silver- plated Copper			
7676C	AR	Axial Ribbon				.787 (20.00) min	Dia.=.03 ± .004 (0.8±0.1)	—						—	—	—
7676C	RW	Radial Wire														
7676C	AW	Axial Wire				—	—	—	—		—	—				

Series	Term. Code	Type/Outlines	Capacitor Dimensions			Overlap and Lead Dimensions				Overlap and Lead Material						
			Length (L _c)	Width (W _c)	Thickness (T _c)	Overlap (B)	Length (L _L)	Width (W _L)	Thickness (T _L)							
7676C	P (non-mag)	Chip (Non-Magnetic)	.760 +.015~ -.010 (19.3 ±0.25)	.760 ±.01 (19.3 ±0.25)	.154 ±.008 (3.90 ±0.20)	.063 (1.60) max	—	—	—	Non-mag, Copper Plated 100% Sn (RoHS)						
7676C	MN (non-mag)	Microstrip (Non-Magnetic)				.787 (20.00) min	.591 ±.01 (15.0 ±0.25)	.008 ±.001 (0.20 ±0.025)	—		—	—	Silver- plated Copper			
7676C	AN (non-mag)	Axial Ribbon (Non-Magnetic)				.787 (20.00) min	Dia.=.03 ± .004 (0.8±0.1)	—						—	—	—
7676C	RN (non-mag)	Radial Wire (Non-Magnetic)														
7676C	BN (non-mag)	Axial Wire (Non-Magnetic)				—	—	—	—		—	—				

◆ Performance

Item	Specifications
Quality Factor (Q)	1 pF to 1000 pF: greater than 2000 at 1 MHz. More than 1000 pF: greater than 2000 at 1 KHz.
Insulation Resistance (IR)	Test Voltage: 500V 10 ⁵ Megohms min. @ +25°C at rated WVDC. 10 ⁴ Megohms min. @ +125°C at rated WVDC.
Rated Voltage	See Rated Voltage Table
Dielectric Withstanding Voltage (DWV)	250% of Voltage for 5 seconds, Rated Voltage ≤ 500VDC 150% of Voltage for 5 seconds, 500VDC < Rated Voltage ≤ 1250VDC 120% of Voltage for 5 seconds, Rated Voltage > 1250VDC
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient (TC)	0 ± 30ppm/°C
Capacitance Drift	± 0.02% or ± 0.02pF, whichever is greater.
Piezoelectric Effects	None

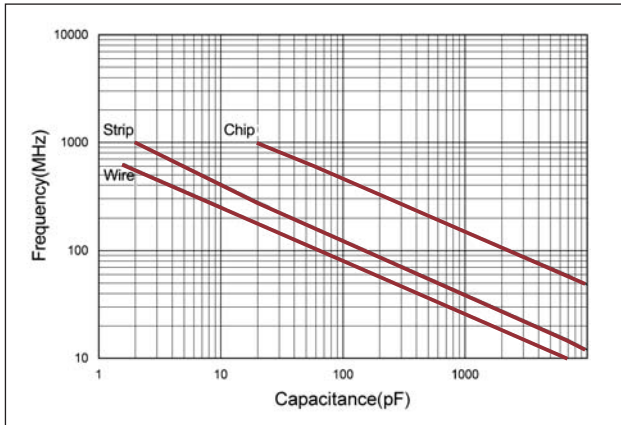
Capacitors are designed and manufactured to meet the requirements of MIL-PRF-55681 and MIL-PRF-123.

◆ Environmental Tests

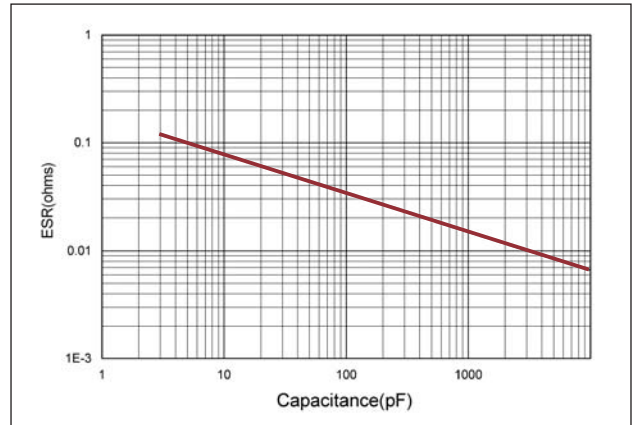
Item	Specifications	Method
Thermal Shock	DWV: the initial value IR: Shall not be less than 30% of the initial value Capacitance change: no more than 0.5% or 0.5pF.	MIL-STD-202, Method 107, Condition A. At the maximum rated temperature (-55°C and 125°C) stay 30 minutes. The time of removing shall not be more than 3 minutes. Perform the five cycles.
Moisture Resistance		MIL-STD-202, Method 106.
Humidity (steady state)	DWV: the initial value IR: the initial value Capacitance change: no more than 0.3% or 0.3pF.	MIL-STD-202, Method 103, Condition A, with 1.5 Volts D.C. applied while subjected to an environment of 85°C with 85% relative humidity for 240 hours minimum.
Life	IR: Shall not be less than 30% of the initial value Capacitance change: no more than 0.2%	MIL-STD-202, Method 108, for 2000 hours, at 125°C. 150% Rated voltage D.C. applied. Extended voltage: 100% extended voltage applied.
Terminal Strength	Microstrip: more than 20 N; Lead wire: more than 10 N.	MIL-STD-202, Method 211,

◆ 7676C Performance Curve

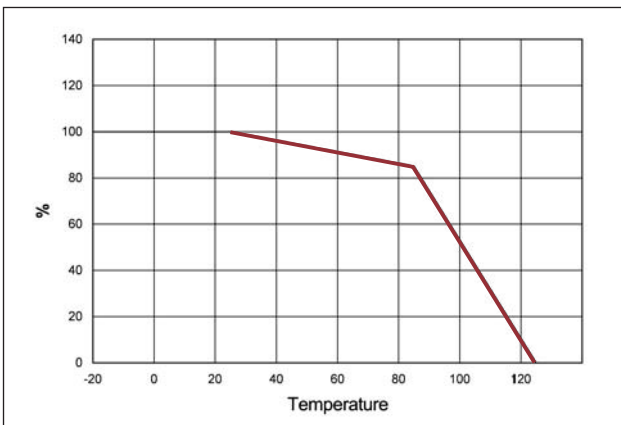
Self Resonant Frequency vs Capacitance



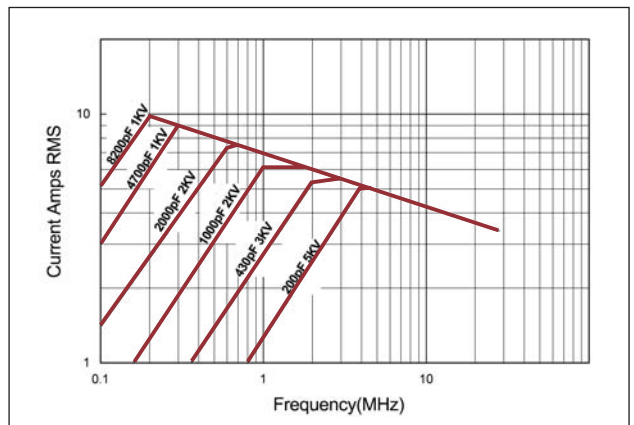
ESR vs Capacitance measured @ 30MHz



% Maximum Current vs Ambient Temperature



7676C Wire Terminals Rated Current vs Frequency



7676C Strip Terminals Rated Current vs Frequency

