

EDCON-COMPONENTS



Specifications

Miniature size wide capacitance
 Ammo Tape available for automati-placement
 Coating by epox resin, creates the excellent humidity resistance and prevent body from damaging during soldering and washing
 Industry standard size and vanous load spacing available.

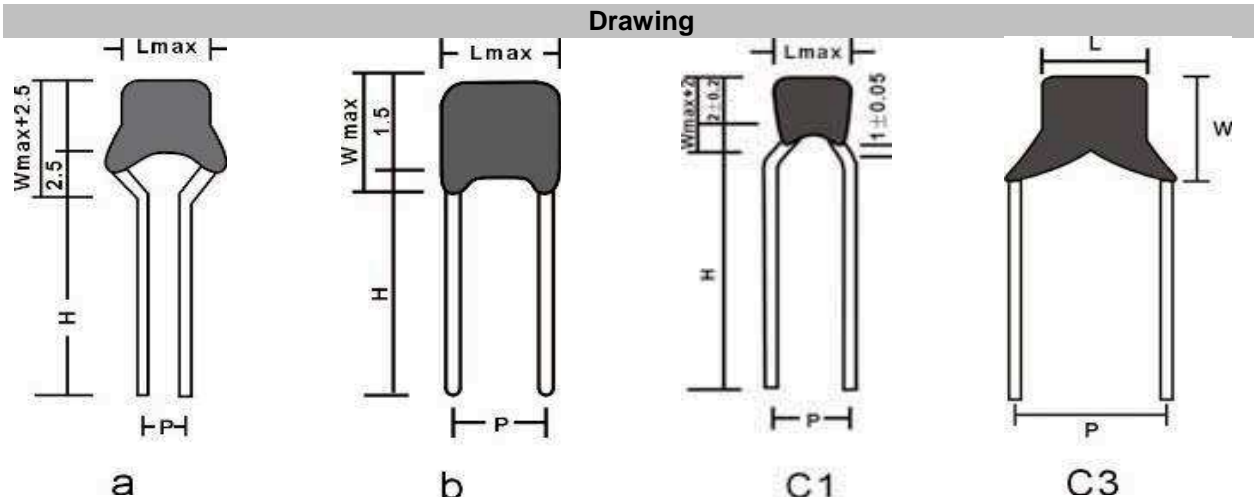
Note 1: Standard Lead length 10 ± 1 mm it can be adjusted between 3,0~35mm per customer request

Note 2: The Diameter of lead is $\varnothing 0,5$ mm $\pm 0,05$ mm

Note 3: The standard shape b, C1, C3 a Shape and C2 shape are on customer request.

Note 4: High Voltage radial MLCC 200V, 500V, 1000V, 2000V etc. are on customer request.

Drawing



Chip	Shape	Dimension				Volt	Capacitance Range (pf)		
		P $\pm 0,5$	Lmax.	Wmax	Tmax.		NPO	X7R	Y5V(Z5U)
O603	b	2,54	4,2	3,8	3,8	25	OR5 ~103	101 ~105	103 ~475
	C1	5,08				50	OR5 ~103	101 ~105	103 ~475
	C3	5,08				100	OR5 ~103	101 ~105	103 ~475

Chip	Shape	Dimension				Volt	Capacitance Range (pf)		
		P $\pm 0,5$	Lmax.	Wmax	Tmax.		NPO	X7R	Y5V(Z5U)
O805	b	2,54	4,2	3,8	3,8	25	OR5 ~103	101 ~105	103 ~475
	C1	5,08				50	OR5 ~103	101 ~474	103 ~105
	C3	5,08				100	OR5 ~103	101 ~104	103 ~104

Multilayer Capacitor Radial Style	
Part No.:	I29003
Customer:	

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	10.08.2015
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Chip	Shape	Dimension				Volt	Capacitance Range (pf)			T.C	NPO / COG	X7R/B	Y5V(Y/F) Z5U/ E		
		P±0,5	Lmax.	Wmax	Tmax.		NPO	X7R	Y5V(Z5U)						
1206	a	2,54	5,5	4,5	3,8	25	0R5 ~104	101 ~225	103 ~106	Dielectric Type	Stable Class I Dielectric	Stable Class II Dielectric	With predictable change of properties with temperature, voltage frequency and time this dielectric is ferroelectric and offer higher capacitance ranges than class I	With high twist dielectric constant and greater variation of properties with temperature and test conditions, very high capacitance per unit volume.	
	b	3,5				50	0R5 ~473	101 ~225	103 ~106						
	C1	5,08				100	0R5 ~473	101 ~105	103 ~155						
1210	a	2,54	5,5	5,5	3,8	25	0R5 ~104	101 ~106	103 ~106	Electrical properties	With negligible dependences of electrical properties on temperature, voltage and frequency and time	Use as blocking, coupling, By-passing discriminating elements.	Suited for By-passing and coupling application such as store power and memory circuit		
	b	3,5				50	0R5 ~473	101 ~475	103 ~106						
	C1	5,08				100	0R5 ~473	101 ~105	103 ~155						
1812	b	P±0,5	8,5	6,5	3,8	25	0R5 ~104	101 ~106	103 ~106	Application	Use in circuits requiring stable performance	100pf ~ 5µF	1nf ~ 14,7µF		
		Lmax.				50	0R5 ~104	101 ~106	103 ~106						
		Wmax				100	0R5 ~473	101 ~105	103 ~155						
2225	b	P±0,5	10,5	9,5	3,8	25	0R5 ~104	101 ~106	103 ~106	Capacitance Range	1pf ~ 10nf	±15%	55°C ~ +125°C		
		Lmax.				50	0R5 ~104	101 ~106	103 ~106						
		Wmax				100	0R5 ~473	101 ~105	103 ~155						
3035	b	P±0,5	12,5	10,5	4,5	25	0R5 ~104	101 ~106	103 ~106	Operating Temperature	0 ±30ppm/°C 55°C ~ +125°C	±15%	55°C ~ +125°C	+30% ~ -80% 25°C ~ +85°C	+22% ~ -56% 10°C ~ +85°C
		Lmax.				50	0R5 ~104	101 ~106	103 ~106						
		Wmax				100	0R5 ~473	101 ~105	103 ~155						

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Electrical Properties standard

Item	Test Standard			
	NPO/CG/GH/RH/UJ/SL	X7R (B)	Z5U / E	Y5V (Y/F)
Capacitance	±5%	±10%	.+80% ~ -20%	±20%
Dissipation Factor	<0,15%	<3,5%	<5%	<7,5% (200nf)
				<10% (200-470nf)
				<15% (470-1000nf)
Insulation Resistance	<10nf	<25nf	<25nf	<25nf
	IR<1000C0M Ω	IR>25nf	IR>25nf	IR>25nf
	C> 10nf	C> 25nf	C> 25nf	C> 25nf
	R * C >100S	R * C >100S	R * C >100S	R * C >100S
Withstanding Voltage	2,5 rated voltage	2,5 rated voltage	2,5 rated voltage	2,5 rated voltage

Test Condition

Test Frequency	1MHz (C>1000pf 1KHz)	1KHz	1KHz	1KHz
Test Voltage of Cap & D.F.	1 ± 0,2V	1 ± 0,2V	0,3 ± 0,2V	0,3 ± 0,2V
Test Voltage of IR	Rated Voltage	Rated Voltage	Rated Voltage	Rated Voltage
Temperature	10 ~ 25°C	10 ~ 25°C	10 ~ 25°C	10 ~ 25°C
Humidity	<75%	<75%	<75%	<75%

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Quality Item & Reliability inspection

Item	Test Specifications	Test Methods					
Solderability	Termination area shall be at least 75% covered with a new solder coating.	The lead wire of acapacitor shall be dipped into a 25% methanol solution of rosin and then into molten solderol 235°C for 2 + 0.5seconds,in both cases the depth of dipping is up to about 2.5 to 3.0mm from the rool of lead.					
istance to soldering f	There shall be no evidence of damage or flash over during the test and sign in tocus.	The lead wire shall be immersed ito the melted solder of 260 +5°C up to about 2.5 to 3.0mm from the main body for 5 +0.5sec and the specitied items shall be measured after leaving for 24 +/-2hours					
	T.C.		$\Delta C/C <$				
	CG/CH/R/H		0,5% or 0,5pf				
	UJ/SL		1% or 1pf				
	B		$\pm 10\%$				
	Y (F) E	$\pm 20\%$					
Life Test	Apperance	There shall be no evidence of damage or flash over during the test and signn in focus					
	Capacitance change	NPO:<2%; X7R <20%; Y5V:<30%					
	D.F	NPO: <0,3	Condition	NPO	X7R	Y5V	Z5U
		X7R: <5%	Temperature	.+125°C		.+85°C	
		Y5V: <7%	Time	T=1000h			
	I.R	R.C. <258	Voltage	V=1,5Vr			
			Recovery time	24 \pm 1h			

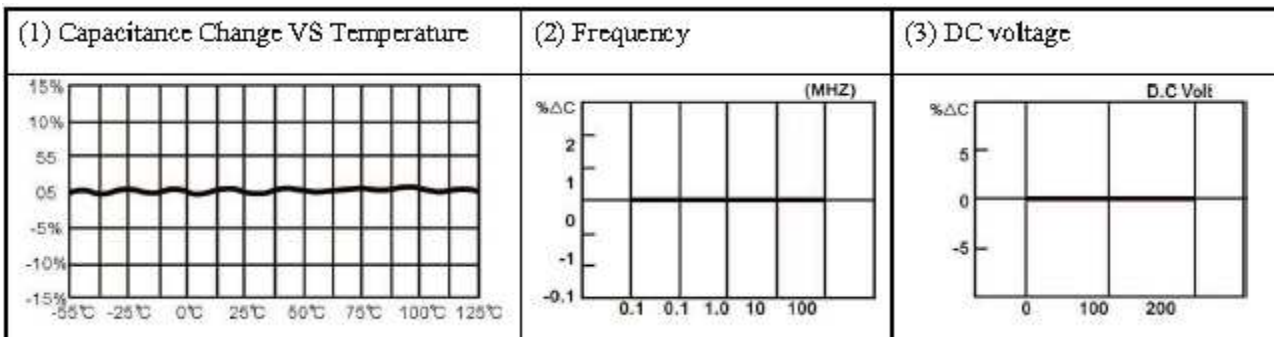
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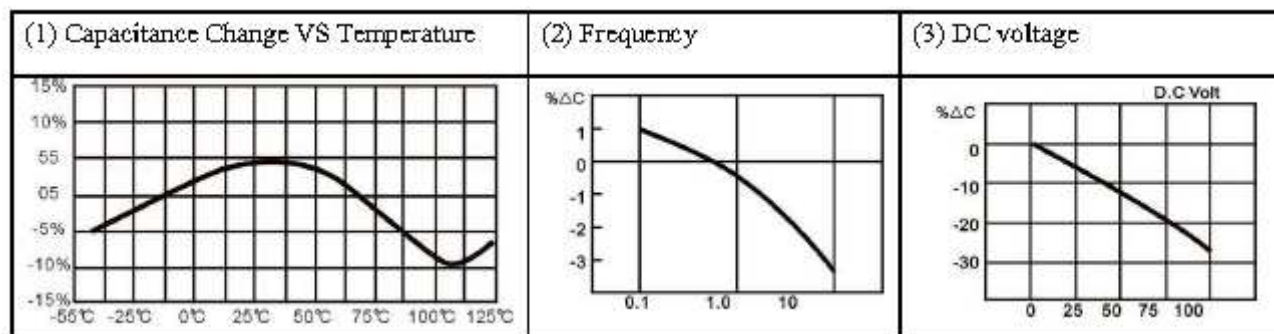


Capacitance Change: VS Temperature Characteristics; Voltage; Frequency Profiles

NPO



X7R



**Multilayer Capacitor
Radial Style**

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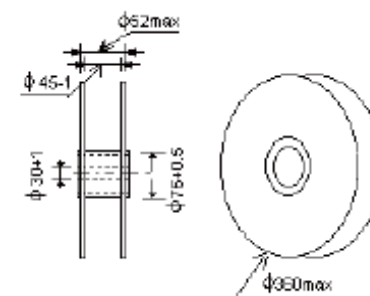
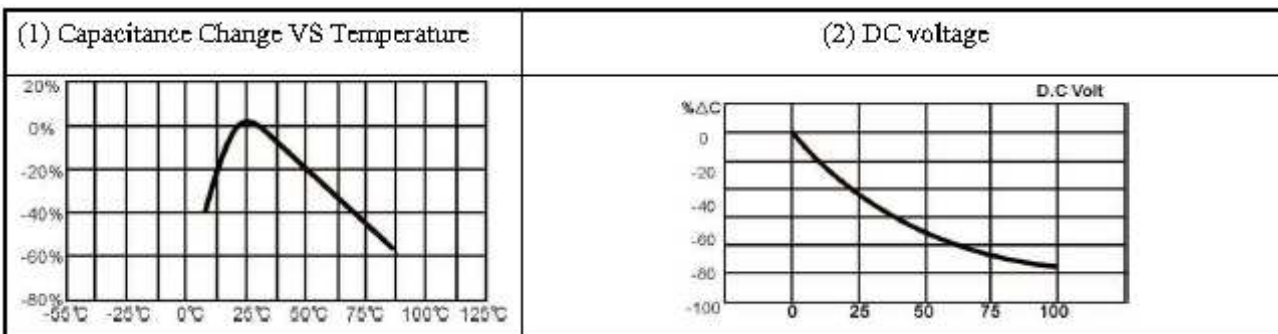
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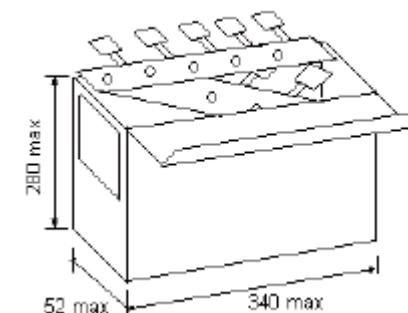
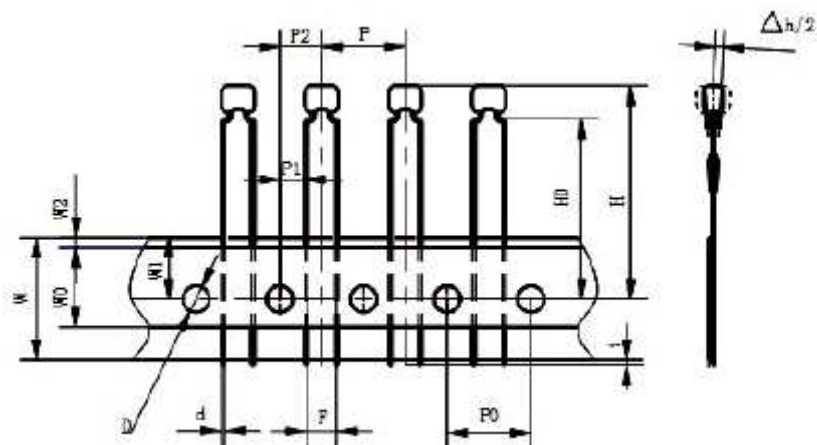


Capacitance Change: VS Temperature Characteristics; Voltage; Frequency Profiles

Z5U



Packing Information Tape/Reel Packing



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Ordering Informations

Serie	Voltage	Material	Range	Size Code	Tolerance	Lead Style	ROHS	Packing		
I29003	500	Z	101	A	Z	B	R	BU		

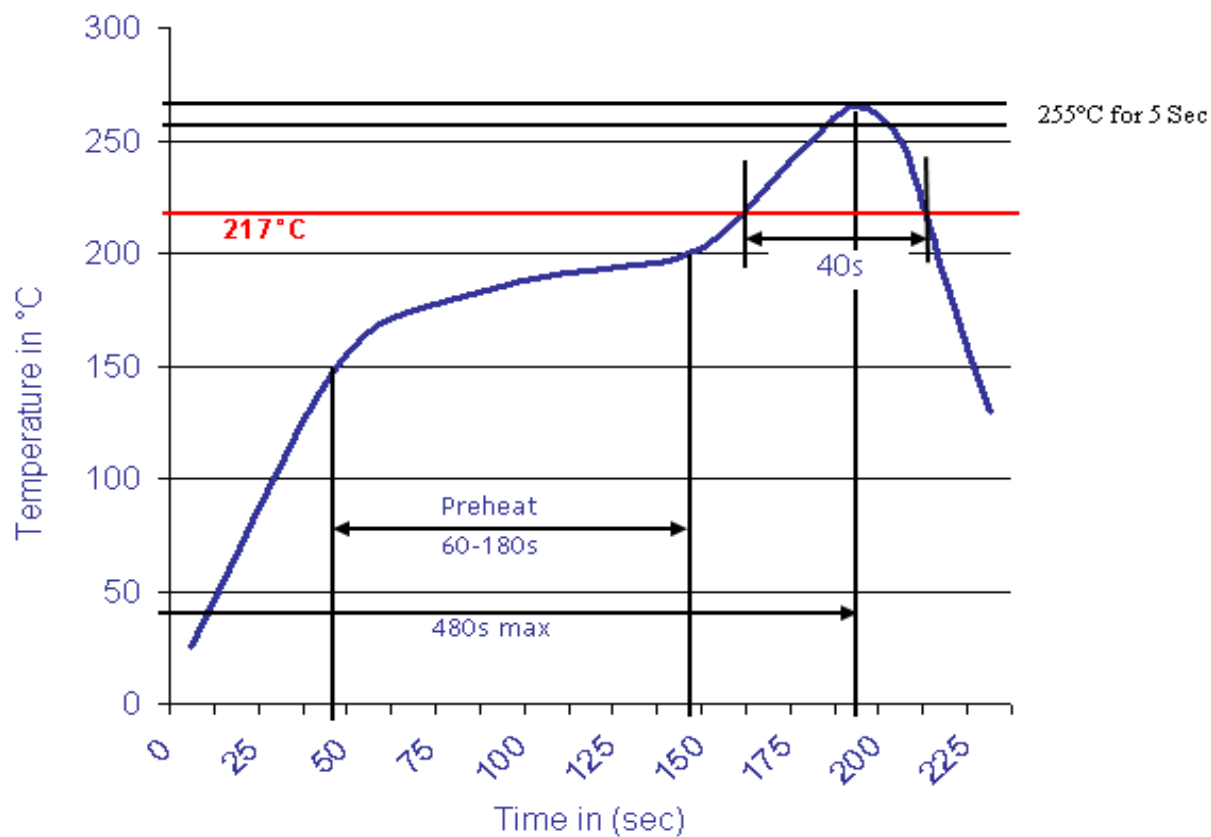
500= 50Volt	Z= Y5V	101= 100pf	A= Size 0603	Z= +80% ~ -20%	B= Type	R= ROHS conform	BU= Bulk-Ware		
101= 100Volt	E= Z5U	100= 10pf	B= Size 0805	V= +20% ~ -10%	A= Type	N= NON ROHS conform	TR= Tape Reel		
201= 200Volt	U= Y5U	1R0= 1,0pf	C= Size 1206	M= ±20%	C= Type		TB= Tape Box (Ammo)		
501= 500Volt	P= Y5P	Range from 0,5pf ~ 10µf	D= Size 1210						
102= 1000Volt	Z= Z5V		E= Size 1812						
202= 2000Volt			F= Size 2220						
			G= Size 3035						

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Classification Reflow Profile (JEDEC J-STD-020C)



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