Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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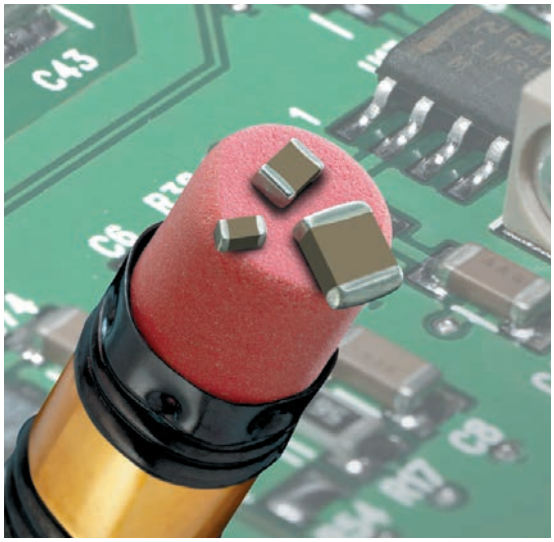
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

TANCERAM® CHIP CAPACITORS



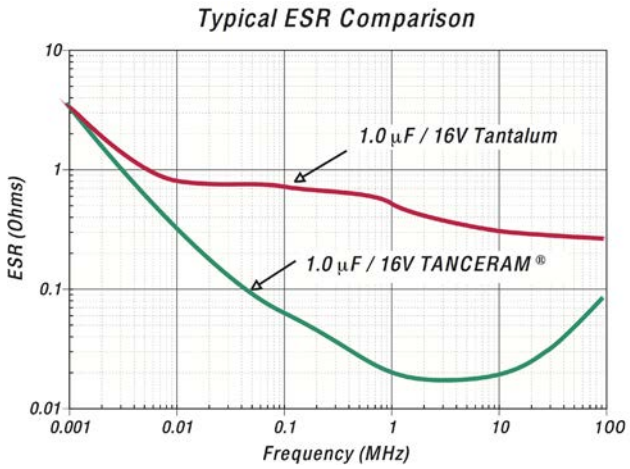
TANCERAM® chip capacitors can replace tantalum capacitors in many applications and offer several key advantages over traditional tantalums. Because TANCERAM® capacitors exhibit extremely low ESR, equivalent circuit performance can often be achieved using considerably lower capacitance values. Low DC leakage reduces current drain, extending the battery life of portable products. TANCERAM® high DC breakdown voltage ratings offer improved reliability and eliminate large voltage de-rating common when designing with tantalums.

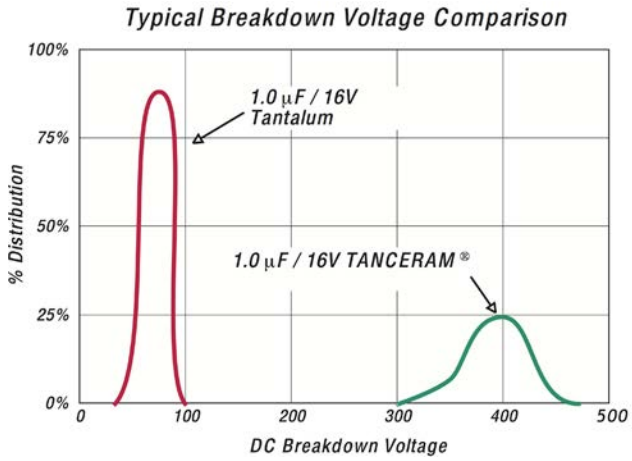
ADVANTAGES

- Low ESR
- Higher Surge Voltage
- Reduced CHIP Size
- Higher Insulation Resistance
- Low DC Leakage
- Non-polarized Devices
- Improved Reliability
- Higher Ripple Current

APPLICATIONS

- Switching Power Supply Smoothing (Input/Output)
- DC/DC Converter Smoothing (Input/Output)
- Backlighting Inverters
- General Digital Circuits



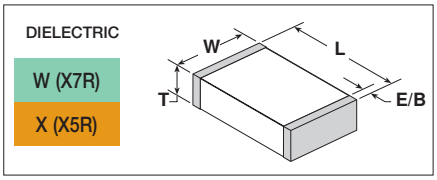


HOW TO ORDER TANCERAM®

Part number written: 100R15X106MV4E

100	R15	X	106	M	V	4	E
VOLTAGE	SIZE	DIELECTRIC	CAPACITANCE	TOLERANCE	TERMINATION	MARKING	PACKING
6R3 = 6.3 V 100 = 10 V 160 = 16 V 250 = 25 V 500 = 50 V 101 = 100 V	See Chart	W = X7R X = X5R	1st two digits are significant; third digit denotes number of zeros. 105 = 1.00 µF 476 = 47.0 µF 107 = 100 µF	K = ±10% M = ±20%	V = Nickel Barrier with 100% Tin Plating (Matte) T = SnPb* (*available on select parts)	4 = Unmarked	Code Type Reel E Plastic 7” T Paper 7” Tape specifications conform to EIA RS481

TANCERAM® CHIP CAPACITORS



CASE SIZE

CAPACITANCE SELECTION

EIA / JDI	INCHES	(mm)	VDC	1.0 µF		2.2 µF		3.3 µF		4.7 µF		10 µF		22 µF		47 µF		100 µF	
0402 R07	L .040 ±.004 W .020 ±.004 T .025 Max. EB .008 ±.004	(1.02 ±.10) (0.51 ±.10) (0.64) (0.20±.10)																	
			16		W														
			10		W														
			6.3		W		X				X		X						
0603 R14	L .063 ±.008 W .032 ±.008 T .035 Max. EB .010±.005	(1.60 ±.20) (0.81 ±.20) (0.89) (.25±.13)	25	W	W						X								
			16	W	W		X				X								
			10	W	W		X				X								
			6.3	W	W	W	X		X		X		X						
0805 R15	L .080 ±.010 W .050 ±.010 T .060 Max. EB .020±.010	(2.03 ±.25) (1.27 ±.25) (1.52) (0.51±.25)	50																
			25	W	W		X				X		X						
			16	W	W	W	X			W	X		X						
			10	W	W	W	X		X	W	X	W	X		X				
			6.3	W	W	W	X		X	W	X	W	X		X		X		
1206 R18	L .125 ±.013 W .062 ±.010 T .070 Max. EB .020 +.015-0.01	(3.17 ±.35) (1.57 ±.25) (1.78) (0.51+.38-.25)	100	W															
			50	W			X												
			35	W			X												
			25	W	W	W	X		X	W	X	W	X						
			16	W	W	W	X	W	X	W	X	W	X		X				
			10	W	W	W	X	W	X	W	X	W	X		X		X		
			6.3	W	W	W	X	W	X	W	X	W	X		X		X		X
1210 S41	L .126 ±.016 W .098 ±.012 T .110 Max. EB .020 +.015-.010	(3.20 ±.40) (2.50 ±.30) (2.8) (0.51+.38-.25)	100	W		W													
			50	W		W				W	X								
			35	W		W	X			W	X	W	X						
			25	W	W	W	X	W		W	X	W	X		X				
			16	W	W	W	X	W		W	X	W	X	W	X		X		
			10						X	W		W	X	W	X		X		X
			6.3						X						X		X		X
1812 S43	L .177 ±.016 W .126 ±.015 T .140 Max. EB .035 ±.020	(4.50 ±.40) (3.20 ±.38) (3.55) (0.89 ±0.51)	100	W		W													
			50	W		W		W											
			25	W								W							
			16												X				
			10												X		X		
			6.3														X		X
				W	X	W	X	W	X	W	X	W	X	W	X	W	X	W	X

ELECTRICAL CHARACTERISTICS

DIELECTRIC:	X7R	X5R
TEMPERATURE COEFFICIENT:	±15% (-55 to +125°C)	±15% (-55 to +85°C)
DISSIPATION FACTOR:	For ≥ 50 VDC: 5% max. For ≤ 35 VDC: 10% max.	For ≥ 50 VDC: 5% max. For ≤ 35 VDC: 10% max.
INSULATION RESISTANCE (MIN. @ 25°C, WVDC)	100 ΩF or 10 GΩ, whichever is less	
DIELECTRIC STRENGTH:	2.5 X WVDC, 25°C, 50mA max.	
TEST CONDITIONS:	Capacitance values ≤ 10 µF: 1.0kHz±50Hz @ 1.0±0.2 Vrms Capacitance values > 10 µF: 120Hz±10Hz @ 0.5V±0.1 Vrms	
OTHER:	See page 70 for additional dielectric specifications.	