Non Magnetic SMD

25V - 10KV

SRT MICROCÉRAMIQUE
MLCC CAPACITORS

APPLICATIONS

- Magnetic resonance imaging
- Medical test equipement
- Laboratory analysis system
- Audio amplifier
- Particle accelerator

FEATURES

- Non magnetic material : precious metal inner electrode, copper barrier
- All size/voltage available in non magnetic form
- Custom voltage, package size, capacitance value on request
- Tested in accordance to AEC-Q200 methodology
- Magnetic properties tested

ELECTRICAL PARAMETERS

ELECTRICAL CHARACTERISTICS :
at + 25°C unless otherwise specified

OPERATING TEMPERATURE :
- 55°C, + 125°C

TEMPERATURE COEFFICIENT :
NPO : ± 30ppm
N2T : 2200 ± 350 ppm/C°
X7R : ± 15% with 0Vdc applied

AGING RATE :
X7R : 2% per decade

Dissipation Factor :
NP0, N2T : ≤ 1.10^{-3} at 1Vrms and 1MHz for values ≤ 1000pF
: ≤ 1.10^{-3} at 1Vrms and 1KHz for values > 1000pF
X7R : ≤ 0.025 at 1kHz

INSULATION RESISTANCE (IR) :
25°C/Un 10^5 MOhm or 1000 Ohm-Farad whichever is less
125°C/Un 10^4 MOhm or 100 Ohm-Farad whichever is less

DIELECTRIC STRENGTH TEST :
2.5Un U≤200V | U+250V 200<U≤500 | 1.5U 500<U<1000 | 1.2U U≥1000
for 5s with 50mA max charging current

QUICK REFERENCE DATA

	0402			0504			0603			0805			1206			1210			1808		
	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R
Min	0.1 pF	0.3 pF	2.2 pF	0.1 pF	0.3 pF	2.2 pF	0.1 pF	0.3 pF	2.2 pF	0.1 pF	1.0 pF	6.8 pF	0.4 pF	4.7 pF	10 pF	0.4 pF	4.7 pF	10 pF	1.0 pF	4.7 pF	10 pF
25V	270 pF	1.2 nF	8.2 nF	1.5 nF	5.6 nF	39 nF	1.2 nF	5.6 nF	39 nF	3.3 nF	15 nF	100 nF	10 nF	47 nF	330 nF	18 nF	82 nF	560 nF	22 nF	100 nF	680 nF
50V	270 pF	1.0 nF	6.8 nF	1.2 nF	5.6 nF	39 nF	1.2 nF	5.6 nF	39 nF	3.3 nF	12 nF	100 nF	10 nF	47 nF	330 nF	18 nF	82 nF	560 nF	22 nF	100 nF	680 nF
100V	220 pF	1.0 nF	6.8 nF	1.2 nF	5.6 nF	39 nF	1.2 nF	5.6 nF	39 nF	3.3 nF	12 nF	100 nF	10 nF	47 nF	330 nF	18 nF	82 nF	560 nF	22 nF	100 nF	680 nF
200V	220 pF	1.0 nF	6.8 nF	1.2 nF	5.6 nF	39 nF	1.2 nF	5.6 nF	39 nF	3.3 nF	12 nF	82 nF	10 nF	47 nF	270 nF	18 nF	82 nF	560 nF	22 nF	100 nF	680 nF
500V	100 pF	330 pF	820 pF	680 pF	1.8 pF	5.6 nF	560 pF	1.8 nF	4.7 nF	2.2 nF	6.8 nF	22 nF	4.7 nF	22 nF	68 nF	15 nF	47 nF	180 nF	15 nF	47 nF	180 nF
1000V							120 pF	390 pF	820 pF	560 pF	1.8 nF	3.3 nF	1.8 nF	5.6 nF	10 nF	4.7 nF	15 nF	27 nF	4.7 nF	12 nF	27 nF
2000V										82 pF	270 pF	560 pF	270 pF	820 pF	1.8 nF	820 pF	2.2 nF	5.6 nF	820 pF	2.2 nF	5.6 nF
3000V													120 pF	330 pF	680 pF	330 pF	820 pF	1.8 nF	330 pF	820 pF	2.2 nF

	1825			2220			2225			3033			3640			4040			5440		
	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R	NP0	N2T	X7R
Min	1.0 pF	10 pF	33 pF	1.0 pF	10 pF	33 pF	1.0 pF	10 pF	33 pF	10 pF	47 pF	100 pF	10 pF	47 pF	100 pF	10 pF	47 pF	100 pF	10 pF	47 pF	100 pF
50V	100 nF	390 nF	2.7 µF	100 nF	390 nF	2.7 µF	120 nF	470 nF	3.3 µF	180 nF	820 nF	5.6 µF	270 nF	1.2 µF	8.2 µF	330 nF	1.2 µF	8.2 µF	390 nF	1.5 µF	12 µF
100V	100 nF	390 nF	2.7 µF	100 nF	390 nF	2.7 µF	120 nF	470 nF	3.3 µF	180 nF	820 nF	5.6 µF	270 nF	1.2 µF	8.2 µF	330 nF	1.2 µF	8.2 µF	390 nF	1.5 µF	12 µF
200V	100 nF	390 nF	2.7 µF	100 nF	390 nF	2.7 µF	120 nF	470 nF	3.3 µF	180 nF	820 nF	5.6 µF	270 nF	1.2 µF	8.2 µF	330 nF	1.2 µF	8.2 µF	390 nF	1.5 µF	12 µF
500V	68 nF	220 nF	1.0 µF	68 nF	220 nF	1.0 µF	82 nF	270 nF	1.2 µF	150 nF	560 nF	2.2 µF	220 nF	820 nF	3.3 µF	270 nF	820 nF	3.3 µF	330 nF	1.2 µF	4.7 µF
630V	47 nF	180 nF	560 nF	56 nF	180 nF	680 nF	68 nF	220 nF	820 nF	120 nF	390 nF	1.5 µF	180 nF	560 nF	2.2 µF	180 nF	680 nF	2.2 µF	270 nF	820 nF	3.3 µF
1000V	27 nF	82 nF	220 nF	27 nF	100 nF	270 nF	33 nF	120 nF	330 nF	68 nF	220 nF	560 nF	100 nF	330 nF	820 nF	100 nF	330 nF	820 nF	150 nF	470 nF	1.2 µF
2000V	3.9 nF	15 nF	39 nF	4.7 nF	15 nF	47 nF	5.6 nF	18 nF	56 nF	12 nF	39 nF	120 nF	18 nF	56 nF	180 nF	18 nF	56 nF	180 nF	27 nF	82 nF	270 nF
3000V	2.2 nF	5.6 nF	15 nF	2.2 nF	5.6 nF	18 nF	3.3 nF	8.2 nF	22 nF	5.6 nF	15 nF	47 nF	8.2 nF	22 nF	68 nF	10 nF	27 nF	82 nF	12 nF	33 nF	100 nF
10KV	82 pF	270 pF		150 pF	330 pF	1.0 nF	180 pF	390 pF	1.2 nF	390 pF	820 pF	2.7 nF	560 pF	1.2 nF	3.9 nF	560 pF	1.2 nF	4.7 nF	820 pF	1.8 nF	5.6 nF

ORDERING INFORMATION

0603	A	103	J	B	C	B	-
SIZE	DIELECTRIC	CAPACITANCE	TOLERANCE	VOLTAGE	TERMINATION	PACKAGING	SPECIAL PARAMETERS
0402 0504 0603 0805 1206 1210 1808 1812 1825 2220 2225 3033 3640 4040 5440	A = NPO P = N2T Y = X7R	Expressed in picofarads (pF). The first two digits are significant, the third digit gives the number of noughts. Example : 102 = 1 000pF	A = ±0.05pF if < 10pF and 0.05% if > 10pF B = ± 0.1pF C = ± 0,25pF D = ± 0,5pF F = ± 1% G = ± 2% J = ± 5% K = ± 10% M = ± 20%	X = 25V A = 50V U = 63V B = 100V C = 200V P = 250V E = 500V F = 630V G = 1000V H=2000V I=3000V 10=10000V	C = Copper Tin (Non magnetic)	B = Reel V = Bulk	- Dxx = Reliability spec Exx = Sorting spec

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