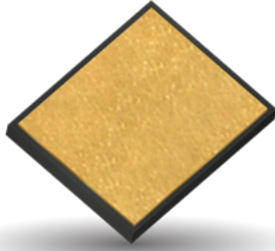


MS Series

MOS (Metal Oxide Semiconductor) Capacitors

MIS (Metal Insulator Semiconductor) Capacitors



GENERAL DESCRIPTION

For applications in RF, microwave, and GHz ranges, KYOCERA AVX now offers MOS and MIS Capacitors. MOS Capacitors are Single Layer Capacitors (SLCs) that use silicon dioxide to produce small, high Q, temperature stable, high breakdown voltage, low leakage capacitors. To ease assembly, KYOCERA AVX offers a wide range of termination styles for epoxy or solder die attach and subsequent Gold or Aluminum wire thermosonic and ultrasonic bonding. Custom applications and designs are welcome. Please contact your local representative.

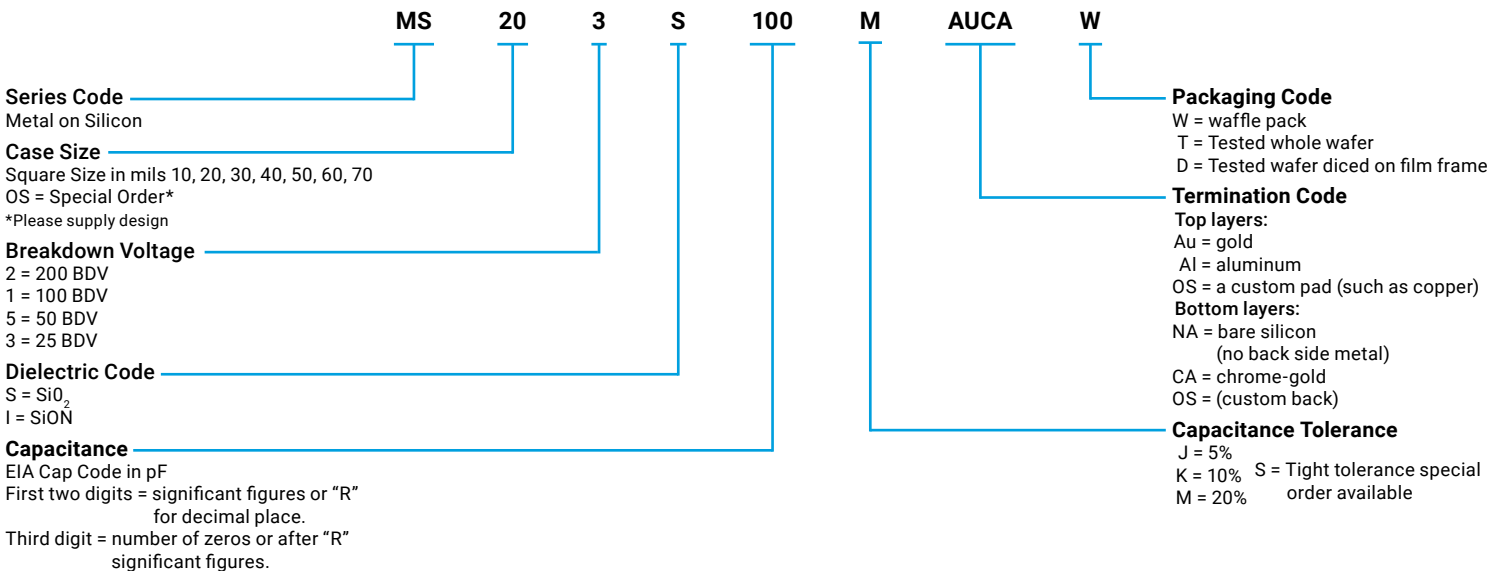
FEATURES

- Small Size: .010 to .070 inches square
- Capacitance Range: 1.0 to 1000pF
- High Q
- DC to 20GHz operation

APPLICATIONS

- Hybrid circuits
- Bias Networks
- Test and Measurement Equipment
- Aerospace
- TOSA and ROSA applications

HOW TO ORDER



MIL TEST METHODS

Standard Test Method	MIL Reference	MIL Section
Bond Strength	MIL-STD-883	2011.7
Shear Strength	MIL-STD-883	2019
Thermal Shock	MIL-STD-202	107
Life	MIL-STD-202	108
Load Humidity (THB)	MIL-STD-202	103 @rated VDC

TYPICAL SPECIFICATIONS

Material	MOS(SiO ₂)
pF/mm² Typical	85 @ 50V rated
TCC	±30 ppm/°C
Breakdown Voltage	≤200 VDC
Peak Voltage at +25°C	1.5 x BDV
Operating Temp. Range	-55°C to 125°C
Thickness	0.25mm (9.85mil)
Size Tolerance	±0.076mm (±3mil)

MS Series

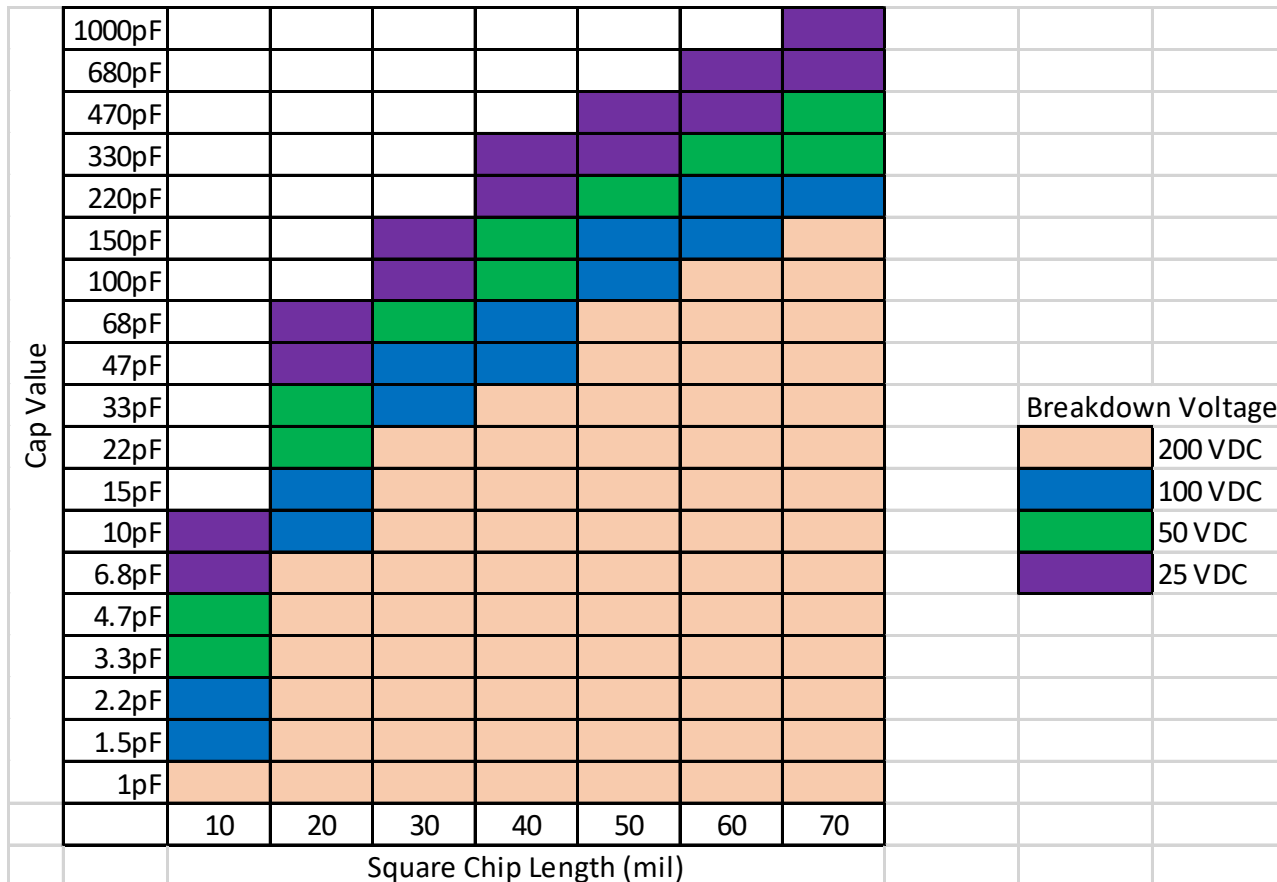
MOS (Metal Oxide Semiconductor) Capacitors

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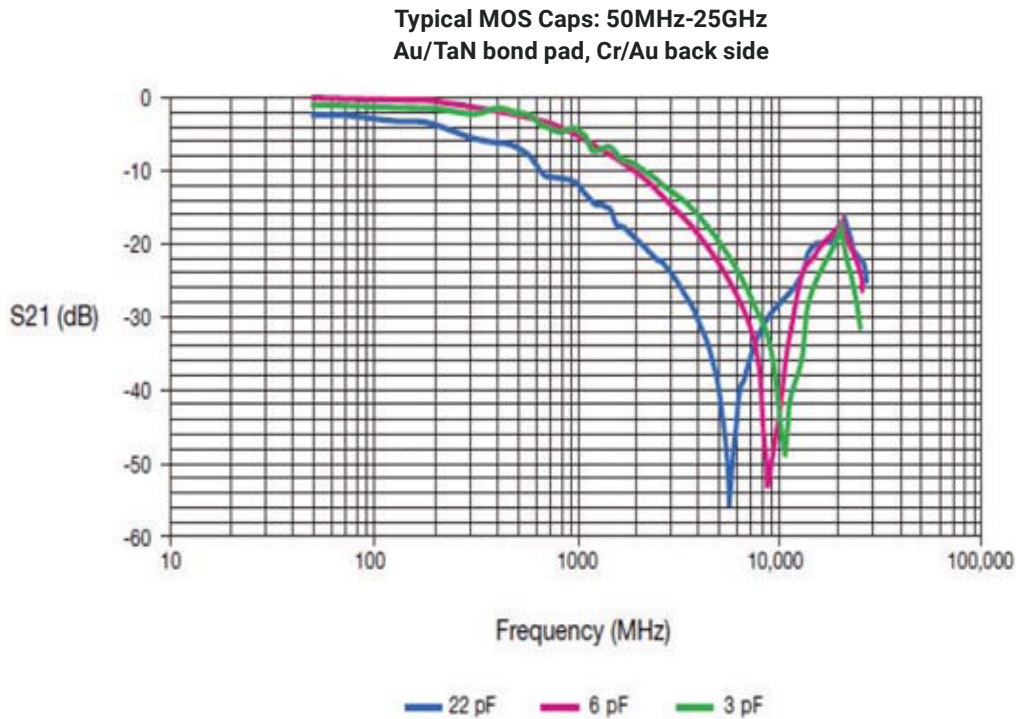


STANDARD VALUES

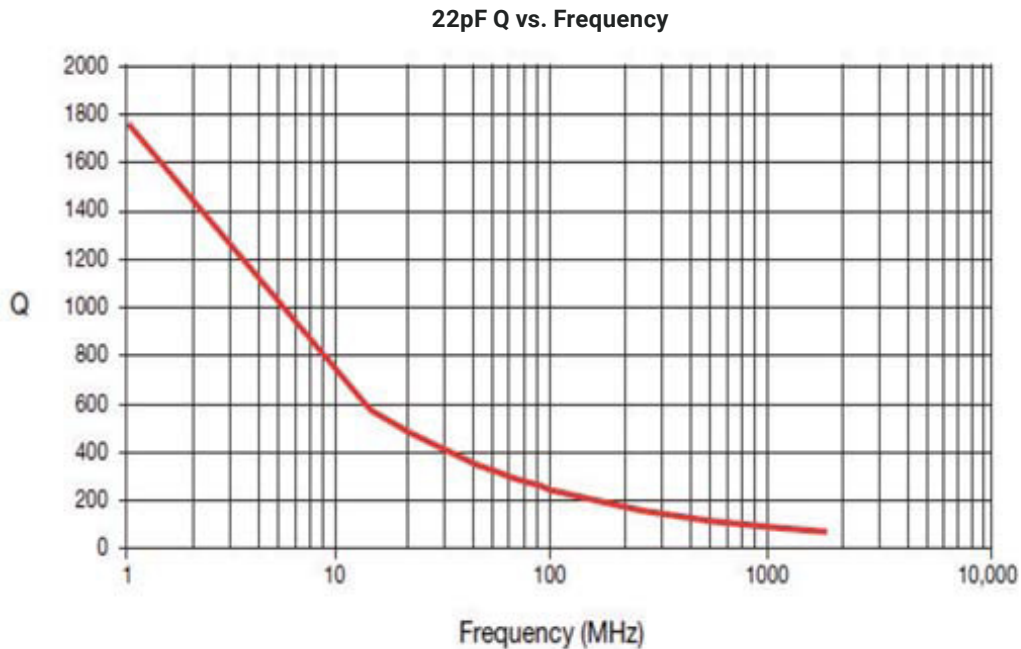
Part Number	Length mil (mm)	Width mil (mm)	Value (pF)	BDV
MS102S0R1MAUCAW	10 (.254)	10 (.254)	0.1	200
MS102SR15MAUCAW	10 (.254)	10 (.254)	0.15	200
MS102SR22MAUCAW	10 (.254)	10 (.254)	0.22	200
MS102SR33MAUCAW	10 (.254)	10 (.254)	0.33	200
MS102SR47MAUCAW	10 (.254)	10 (.254)	0.47	200
MS102SR68MAUCAW	10 (.254)	10 (.254)	0.68	200
MSOS2S1R0MAUCAW	10 (.254)	20 (.508)	1	200
MSOS2S1R5MAUCAW	10 (.254)	20 (.508)	1.5	200
MS202S2R2MAUCAW	20 (.508)	20 (.508)	2.2	200
MS202S3R3MAUCAW	20 (.508)	20 (.508)	3.3	200
MS103S4R7KAUCAW	10 (.254)	10 (.254)	4.7	25
MSOS2S4R7KAUCAW	30 (.762)	20 (.508)	4.7	200
MSOS2S6R8KAUCAW	30 (.762)	20 (.508)	6.8	200
MS103S100KAUCAW	10 (.254)	10 (.254)	10	25
MS302S100KAUCAW	30 (.762)	30 (.762)	10	200
MSOS3S220KAUCAW	10 (.254)	20 (.508)	22	25
MS203S470KAUCAW	20 (.508)	20 (.508)	47	25
MS303S101KAUCAW	30 (.762)	30 (.762)	100	25
MS503S471KAUCAW	50 (1.27)	50 (1.27)	470	25
MS703S102KAUCAW	70 (1.778)	70 (1.778)	1000	25



S21 AND Q VERSUS FREQUENCY



Tested on Alumina Test Board with Agilent VNA



Tested on Alumina Test Board with Agilent VNA