

Decade

MA 2405



MA 2405 Decade capacitor is intended for all application areas where capacitance variation/selection by hand is required. It is all passive electric device housed in metallic case and with internal guarding. It consists of 3 decades for selection of the capacitance in range of 100 pF up to 100 nF. Set value is directly visible on decade's dials. MA 2405 Decade Capacitor uses high quality polypropylene capacitors providing accuracy of 5 %. Very good DC insulation resistance of the capacitors enables the application also in DC circuits, insulation materials also provide low dissipation factor at the frequencies of 500 kHz and up.

MA 2705



MA 2705 Decade inductance is intended for all application areas where inductance variation/selection by hand is required. It is passive electric device housed in metallic case. It consists of 3 decades for selection of the inductance in range of 0 mH up to 999 mH. Set value is directly visible on decade's dials. MA 2705 Decade inductance uses ferrite chokes providing accuracy of 5 % at 50% of rated current.

MA 2115 and MA 2115 S

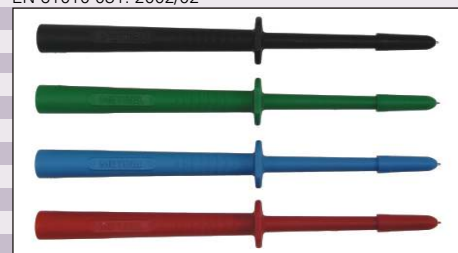


MA 2115 and **MA 2115 S** Decade resistors are intended for all application areas where resistances variation/selection by hand are required. It is passive electric device housed in metallic case. Each consist of 7 decades with each own rotary switch with range multiplier from 0 to 9, and ∞ . Safety 4 mm sockets are connected to each resistance chain that it could be individually accessible. It is also possible to split resistance chain into two or more independent insulated groups by selection of rotary switch position ∞ .

Measurement accessories



Test lead 1000 V CAT II
Wire: PVC 0.75 mm;
I_{max.}: 12 A
Voltage: 1000 V
Standards:
EN 61010-1: 2001
EN 61010-031: 2002/02



Test probes 1000 V CAT III
Max. current: 36 A
Contact resistance: <5 mW
Standard: EN 61010-031: 2002/02

Technical Specification

Decade capacitor	Part No. MA 2405
Capacitance:	100 pF to 100.000 pF in steps of 100 pF
Three decade ranges:	
x 100 pF	100 pF to 1000 pF
x 1000 pF	1000 pF to 9000 pF
x 10.000 pF	10.000 pF to 90.000 pF
Accuracy:	± 5 %; ± 2 % on request
Dissipation factor (tg δ):	max. 5 · 10 ⁻⁴ at 10 kHz
Limit frequencies:	
x 100 pF range	9 MHz
x 1000 pF range	2 MHz
x 10.000 pF range	500 kHz
Maximum voltage:	
DC	max. 250 V
AC	max. 175 V/50Hz
Guard capacitance working:	approx. 100 pF
Insulation resistance:	min 10.000 MΩ
Applicable overvoltage:	CAT II 150 V (case grounded)
Discharging:	via 100 k resistor with push-button "DISCHARGE"
Overvoltage category:	II
Dimensions (w x h x l):	190 x 90 x 170 mm
Weight:	1.35 kg

Decade inductance	Part No. MA 2705
Inductance range:	0 mH to 999 mH
- sub ranges:	
x 1 mH	0 mH to 9 mH
x 10 mH	0 mH to 90 mH
x 100 mH	0 mH to 900 mH
Accuracy within temperature range from 15 °C to 40 °C:	± 5 % at I _{N/2}
Increase of inductance at I _N :	2 %
Capacitance between coils and housing:	<50 pF
Test voltage against housing:	1.5 kV
Current load (continuous):	max. 100 mA
Overvoltage category:	II
Dimensions (w x h x l):	190 x 90 x 175 mm
Weight:	1.15 kg

Decade resistor	Part No. MA 2115
Resistance range:	0 to 9 999 999 Ω
7 decades	9 x 1 Ω .. 9 x 1 MΩ
Optional on request:	
Decade resistor	Part No. MA 2115S
Modified decades:	9 x 0,1 Ω or up to 9 x 10 MΩ

Accuracy:	
- individual decade unit:	± 1% + 0.08 Ω
- 9 x 0.1 Ω option:	± 2% + 0.08 Ω
- overall:	± 1% + 0.4 Ω
Maximum ratings:	
- continuous power dissipation:	1 W / resistor
- voltage / current:	marked on front plate
- working voltage to case:	500 V d.c. / a.c. rms
- working voltage in position:	250 V d.c. / a.c. rms
Protection classification:	Class I
Over-voltage category:	CAT III 300 V
Pollution degree:	2
Working temperature range:	(0 to 40) °C
Storage temperature range:	-10 °C to 80 °C
Max. humidity:	85 % RH (0 to 40) °C
Dimensions (w x h x d):	(267 x 89 x 97) mm
Weight:	0,8 kg