

# JANTZEN AUDIO

## Compact MKT

Metalized polyester film capacitor



# PRODUCT FEATURE

The Compact MKT capacitors are made with the highest quality metalized polyester film on the market.

One of the biggest strengths of the Compact MKT caps is their compact sizing.

We have been able to make them smaller in size compared to the current “plain/smooth foil” electrolytic capacitors offered as of 2024.

MKT capacitors are known to rank higher in the hierarchy of sonic performance than electrolytic capacitors.

The Compact MKT capacitors therefore offer better sonic performance, smaller sizing, and lower pricing, compared to “plain/smooth foil” electrolytic capacitors.

With a voltage rating of 160 volts DC, they are also more versatile to use than electrolytic capacitors, usually only rated at 60 volts to 100 volts DC.

Due to their rounded-off square shape (flat top and bottom surface), they can be easily stacked when it is necessary to couple multiple capacitors in parallel to reach a higher capacity value for a certain crossover position.

As they are stackable, they will take up significantly less space, when compared to **round-shaped** equivalent values of plain/smooth foil electrolytic capacitors, MKT or PP foil capacitors that will need to be mounted side by side.

# SIZING FOOTPRINT ON CROSSOVERS

The sizing footprint examples shown below showcase current sizes for plain/smooth foil electrolytic capacitors offered in the audio market as of 2024 versus the Compact MKT caps

2 x plain (smooth) foil electrolytic capacitors 100  $\mu$ F in parallel:

Total crossover footprint = **46,20 cm<sup>2</sup>**



2 x Compact MKT capacitors 100  $\mu$ F in parallel:

Total crossover footprint = **23,94 cm<sup>2</sup>**



# TECHNICAL DATA

- Capacitor foil: Metalized polyester foil
- Dielectric insulation: Polyester foil
- Terminal leads: Tinned 4N copper wire
- Voltage rating: 160 VDC / 100 VAC
- Capacity tolerance: +/- 5%
- Dielectric constant: Non-polar dielectric
- Dissipation factor: Extremely low
- Dielectric absorption factor: <0.5% @20°C
- Dielectric thickness: PB=5μm
- Equivalent series resistance (ESR): Extremely low
- Self-inductance: <15 nH
- Insulation resistance: >5000 MΩx μF 10000 MΩ min
- Temperature coefficient: -200°Cx10<sup>-6</sup>/°C
- Temperature Range: -55°C to + 125°C
- Metal layer thickness: PB=0.3 μm
- Metal layer conductivity: PB = 1.2 Ω/ cm<sup>2</sup>

# VALUES AND SIZING

Product index:	Capacity [ $\mu\text{F}$ ]:	Voltage rating:	Size (H x W x L):
001-8000	1,00 $\mu\text{F}$ +/- 5%	160 VDC	7x11x19 mm
001-8010	1,50 $\mu\text{F}$ +/- 5%	160 VDC	8x12x19 mm
001-8020	2,20 $\mu\text{F}$ +/- 5%	160 VDC	8x13x25 mm
001-8030	2,70 $\mu\text{F}$ +/- 5%	160 VDC	9x14x25 mm
001-8040	3,30 $\mu\text{F}$ +/- 5%	160 VDC	10x15x25 mm
001-8050	3,90 $\mu\text{F}$ +/- 5%	160 VDC	12x16x25 mm
001-8060	4,70 $\mu\text{F}$ +/- 5%	160 VDC	10x15x31 mm
001-8070	5,60 $\mu\text{F}$ +/- 5%	160 VDC	11x16x31 mm
001-8080	6,80 $\mu\text{F}$ +/- 5%	160 VDC	12x17x31 mm
001-8090	8,20 $\mu\text{F}$ +/- 5%	160 VDC	11x18x37 mm
001-8100	10 $\mu\text{F}$ +/- 5%	160 VDC	13x19x37 mm
001-8110	12 $\mu\text{F}$ +/- 5%	160 VDC	14x21x38 mm
001-8120	15 $\mu\text{F}$ +/- 5%	160 VDC	16x23x37 mm
001-8130	18 $\mu\text{F}$ +/- 5%	160 VDC	17x24x37 mm
001-8140	22 $\mu\text{F}$ +/- 5%	160 VDC	16x24x46 mm
001-8150	33 $\mu\text{F}$ +/- 5%	160 VDC	20x26x57 mm
001-8160	47 $\mu\text{F}$ +/- 5%	160 VDC	23x30x57 mm
001-8170	56 $\mu\text{F}$ +/- 5%	160 VDC	25x33x56 mm
001-8180	68 $\mu\text{F}$ +/- 5%	160 VDC	29x37x56 mm
001-8190	82 $\mu\text{F}$ +/- 5%	160 VDC	31x39x57 mm
001-8200	100 $\mu\text{F}$ +/- 5%	160 VDC	34x42x57 mm

