TAD – FOIL to FILM Capacitors "Mustard"-Caps

The TAD foil-to-film capacitors are made to the same specification as the mustard yellow capacitors which were originally made by or Mullard™ and Philips™. They were found in some Vintage Marshall™, Vox™, Hiwatt™ and other premium UK made guitar amplifiers in the early sixties till mid seventies.

TAD capacitors use same thickness of the foil, film dielectric and close dimensional proportions as the historic originals. At the same time the rated voltage has been improved to 630V for better safety. Using the original dimensional proportions is an important detail as the dimension has impact on the response characteristic.

TAD capacitors provide the harmonics, creating a smooth, still transparent, thick lower mid and airy top end that gives live to tube amps.

Characteristics

Part number:	Capacitance nF	Rated Voltage VDC	Toler-ance %	Test Voltage V	DF 10Hz MAX (%)	Dimension(mm)		
						L	D	dΦ
V-MC1	1.0	630	10	1100	0.1	18	8	0.8
V-MC2	2.2	630	10	1100	0.1	22	7.5	0.8
V-MC4	4.7	630	10	1100	0.1	22	7.5	0.8
V-MC10	10	630	10	1100	0.1	22	9	0.8
V-MC22	22	630	10	1100	0.1	22	8.5	0.8
V-MC33	33	630	10	1100	0.1	20	12	0.8
V-MC47	47	630	10	1100	0.1	22	11.5	0.8
V-MC68	68	630	10	1100	0.1	20	16	0.8
V-MC100	100	630	10	1100	0.2	32	10	0.8
V-MC150	150	630	10	1100	0.2	32	12	0.8
V-MC220	220	630	10	1100	0.2	32	14.5	0.8
V-MC470	470	630	10	1100	0.2	37	19.5	0.8
V-MC680-160	680	160	10	250	0.2	30	17.5	0.8

Main Specific Reference Data & Test Method:

Item	Performance	Test method	AQL(%)
Capacitance	See list above	Test frequency:1.0±0.02KHz Test voltage: ≤1V Test temperature:25°C	0.25
Withstand Voltage	See list	Test voltage applied between terminals	0.25
Dissipation factor	See list	Test frequency:10KHz Test voltage: ≤1V Test temperature:25°C	0.25
Insulation Resistance	C≤0.33uF IR≥30GΩ C>0.33uF IR≥10GΩ•uF	Test voltage:100VDC Test time: Reading after 1 minute	
Operating Temperature	-40°C / +85°C		
Climatic Category	40 / 085 / 21		

* The capacitors are completely compliant with directive 2011/65/EC of the European parliament and of the council of June 8, 2013 on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment.