

404802692041 Product Details

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404802692041

TE Internal Number: 3-1625931-4

 Active

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Variable Resistors


 Converted to EU RoHS/ELV Compliant
 (Statement of Compliance)

Product Highlights:

- Variable Resistor
- Resistor Type = Potentiometer
- Resistance Selection = K Ω
- Resistance = 220K Ω
- Power Rating = 2.00 W

[View all Features](#)

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Documentation & Additional Information

Product Drawings:

- None Available

Catalog Pages/Data Sheets:

- [1309350_PASSIVE_COMPONENT](#) (PDF, English)
- [Spindle Operated Potentiometers - Type M Series - Ty...](#) (PDF, English)

Product Specifications:

- None Available

Application Specifications:

- None Available

Instruction Sheets:

- None Available

CAD Files: (CAD Format & Compression Information)

- [2D Drawing](#) (DXF, Version P00K)
- [3D Model](#) (IGES, Version P00K)
- [3D Model](#) (STEP, Version P00K)

[List all Documents](#)

Additional Information:

- [Product Line Information](#)

Related Products:

- [Tooling](#)

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- Product Type = Variable Resistor
- Resistor Type = Potentiometer
- Element = Cermet
- Series = M
- Sealed = Yes
- Termination Type = PCB Terminations

Electrical Characteristics:

- Resistance Selection (Ω) = K
- Resistance (Ω) = 220K
- Power Rating (W) = 2.00
- Tolerance (%) = 10

Termination Features:

- Termination Post Orientation = 5.0 x 3.9

Body Features:

- Shaft Style = Plain, 1"
- Package, Component Size = 19

Configuration Features:

- Sections = Single
- Adjustment Location = Top
- Adjustment Style = Spindle
- Operating Function = Single Turn

Industry Standards:

- RoHS/ELV Compliance = RoHS compliant, ELV compliant
- Lead Free Solder Processes = Wave solder capable to 240°C, Wave solder capable to 260°C, Wave solder capable to 265°C, Reflow solder capable to 245°C, Reflow solder capable to 260°C, Pin-in-Paste capable to 245°C, Pin-in-Paste capable to 260°C
- RoHS/ELV Compliance History = Converted to comply with RoHS directive

Other:

- Brand = Citec

Type M Series

Key Features

- Cermet Element
- Proven Reliability
- 2W Power Rating
- Strong Construction
- Sealed to Military Standard
- Panel Sealed (MC1)
- Rugged Terminations



This is one of TE Connectivity's most popular ranges and is available with cermet resistance elements. This choice means that components offer excellent electrical and thermal stability, reliability, low noise and long life which makes them most suitable for the majority of professional applications.

The MC Series is used in the Tornado Project and is the standard single turn general purpose panel control used for most military applications in the UK and in Europe.

Characteristics - Electrical

	MC1	MCU
Element Technology:	Cermet	Cermet
Std. Resistance Range:	100 Ohms to 2M2	10 Ohms to 1M Ohm
Law:	Linear	Linear
Resistance Values:	1,2,2 and 4.7 in each decade	1,2,2 and 4.7 in each decade
Selection Tolerance:	± 10%	± 10%
Rated Dissipation at 70°C:	2W	2W
Limiting Element Voltage:	315 Vdc	315 Vdc
Isolation Voltage:	450 Vdc	450 Vdc
Electrical Rotation:	210°	210°
Terminal Resistance:	< 3 Ohms	< 3 Ohms
Noise (E.N.R.):	3% Max.	3 Ohms or 3%
Insulation Resistance:	> 5 G Ohms	> 1 G Ohms
Voltage Proof:	630 V ac peak	630 V ac peak

Characteristics - Mechanical

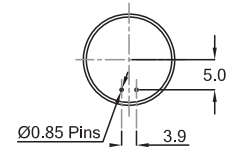
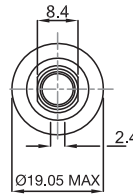
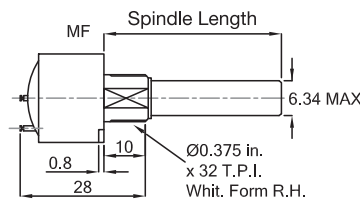
Starting Torque:	< 85 mNm	< 40 mNm
Mechanical Rotation:	270°	270°
End Stop Torque:	800 mNm	800 mNm

Type M Series

Characteristics - Environmental

Limits of Resistance Change:	3% (after 1000 hrs)	3% (after 1000 hrs)
Temperature Coefficient:	0.5%	0.75%
Bump Severity:	390 m/s ² , 4000 bumps	245 m/s ² , 4000 bumps
Vibration Severity:	10-500 Hz 98 m/s ²	10-150 Hz 98 m/s ²
Climatic Category:	55/125/56	55/125/21
Mechanical Endurance:	25000 operations Min.	25000 operations Min.
Sealing:	Panel sealed	Fully enclosed

Dimensions



MC1/MCU Wire Terminations

Type	Standard Spindles		
	Plain	Slotted	Drilled
MC1	25	16, 20, 25	25
MCU	25	16, 20, 25	25

Standard Spindles	
Slotted	Drilled
1.53 Deep	Hole 3.18, Dia. 5.08
x1.53 Wide	From End of Spindle

How to Order

Please specify type, resistance value, tolerance and spindle details. Add inspection requirement where appropriate. **e.g. MC1 10K ± 10% PLAIN 25 mm**
 We will advise a Tyco part number against this description.