

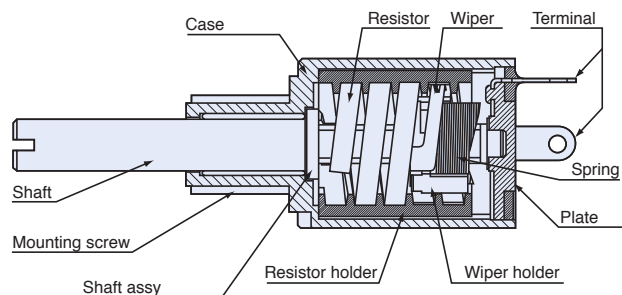
CONDUCTIVE PLASTIC 3 TURNS TYPE

MC series

RoHS compliant



Basic construction



Conductive plastic 3 turns type

FEATURES

- Compact size
- Fine setting is possible
- Long life
- High following characteristics
- High resolution (Essentially infinite)
- RoHS compliant

PART NUMBER DESIGNATION

MC1003 - 000 - 502

Series name

Nominal resistance value (Ω)

502 : 5 k
103 : 10 k
203 : 20 k

LIST OF PART NUMBERS

Nominal resistance value (Ω)	Part number
5 k	MC1003-000-502
10 k	MC1003-000-103
20 k	➔ MC1003-000-203

※ Verify the above part numbers when placing orders.

The products indicated by ➔ mark are manufactured upon receipt of order basis.

MC POTENTIOMETERS

STANDARD SPECIFICATIONS

Electrical characteristics

Nominal resistance value	5 k Ω , 10 k Ω , 20 k Ω
Resistance tolerance	$\pm 20\%$
Resolution	Essentially infinite
Power rating	0.19 W
Independent linearity	$\pm 1\%$
Effective electrical angle	1080°
Temp. coefficient of resistance	± 400 ppm/°C maximum
Insulation resistance	1000 M Ω (at DC250 V) minimum
Dielectric strength	500 V rms (1 min)

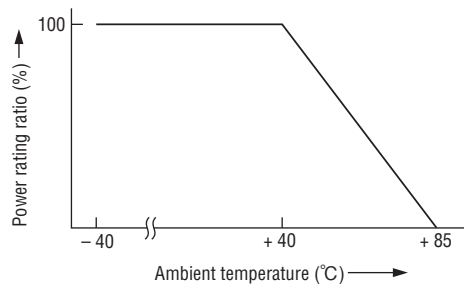
Mechanical characteristics

Mechanical angle	1080° $\pm 10^\circ$
Stop strength	4.41 N·cm {0.45 kgf·cm} maximum
Operating torque	0.294 N·cm {30 gf·cm} maximum
Rotational life	1 million cycles
Tighten screw torque	49 N·cm {5 kgf·cm} maximum

Environmental characteristics

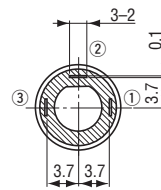
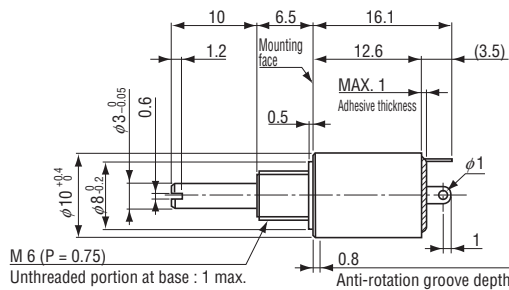
Operating temp. range	-40 ~ 85 °C
Net weight	Approx. 2.5 g
Protection grade	IP40

RATED POWER DERATING CURVE

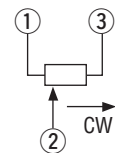


OUTLINE DIMENSIONS

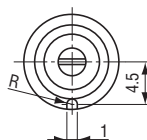
(Unit: mm)



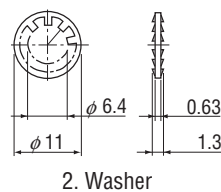
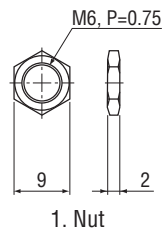
Wiring diagram



Anti-rotation details



<Accessories>



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Nidec:](#)

[MC1003-000-502](#) [MC1003-000-103](#) [MC1003-000-203](#)