multicomp

SPC-F005.DWG

REVISIONS

DOC. NO. SPC-F005 • Effective: 7/8/02 • DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1991	A	RELEASED	JN	07/03/08	JWM	07/07/08	JWV	07/07/08
1995	B	Additional parts added	JN	09/09/08	JWM	09/09/08	JWM	09/09/08

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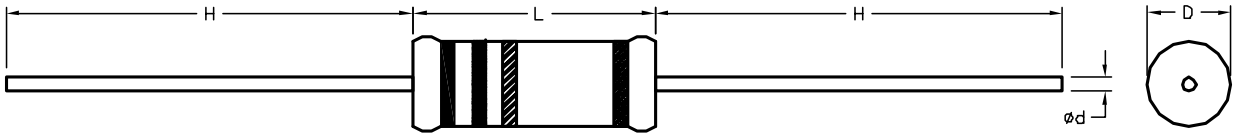
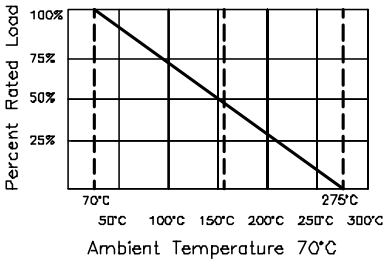
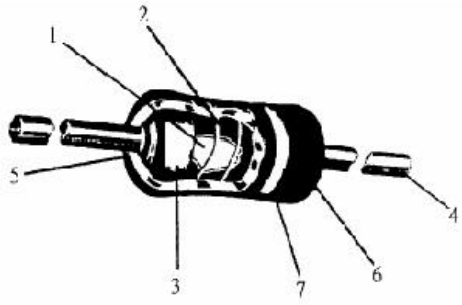


Note:
– Temperature Coefficient: <20Ω: ±400 ppm/°C;
≥ 20Ω ±300 ppm/°C

Wattage Derating Chart





No.	Name	Material
1	Basic Body	Rod Type Ceramics
2	Resistor	Cu-Ni Alloy / Ni-Cr Alloy
3	End Cap	Steel (Tin plated iron surface)
4	Lead Wire	annealed copper wire coated with tin
5	Joint	By Welding
6	Coating	Insulated & Non-Flame paint (Color: Light Green)
7	Color Code	Non-Flame Epoxy Resin

TOLERANCES:

UNLESS OTHERWISE SPECIFIED,
.XX ±0.125
.XXX ±0.062
.XXXX ±0.0005

DRAWN BY:	DATE:
Jason Nash	07/03/08
CHECKED BY:	DATE:
JWM	07/07/08
APPROVED BY:	DATE:
JWM	07/07/08

DRAWING TITLE: RoHS Compliant Wirewound Resistors

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	TA-883	TA-883.DWG	A

SCALE: NTS | U.O.M.: INCHES | SHEET: 1 OF 3

Performance specification

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Characteristics	Limits	Test Methods (JIS - C - 5201-1)
Temperature coefficient	**±300 PPM/°C Max.** **<20 Ω± 400 PPM/°C**	**Natural resistance change per temp. degree centigrade** $\frac{R2-R1}{R1(t2-t1)}$ **X 10^6 (PPM/°C)** **R1: Resistance value at room temperature (t1)** **R2: Resistance value at room temp. plus 100°C (t2)**
Short time overload	**Resistance change rate is:** **± (2.0 % + 0.05 Ω) Max.**	**Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds**
Short time overload	**No Evidence of mechanical damage**	**-Direct Load:** Resistance to a 2.5kgs direct load for 10sec. in the direction of the longitudinal axis of the terminal leads. **-Twist test:** Terminal leads shall be bent throught 90° at a point of about 6mm from the body of the resistor and shall be rotated through 360° about the original axis of the bent terminal in alternating direction for a total of 3 rotations.
Temperature cycling	± (0.5 % + 0.05Ù) Max.	**Resistance change after continuous 5 cycles for duty cycle specified below:** Step 1: -55°C ±3°C, 30 mins Step 2: Room temp., 10 ~ 15 mins Step 3: -155°C ±2°C, 30 mins Step 4: Room temp., 10 ~ 15 mins
Load life in humidity	**Resistance change rate is** **± (5.0 % + 0.05 Ω) Max.**	**Resistance change after 1,000 hours (1.5 hours** "on", 0.5 hour "off") at RCWV in a humidity chamber controlled at 40°C ±2°C and 90 to 95 % relative humidiity
Load Life	**Resistance change rate is** **± (5.0 % + 0.05 Ω) Max.**	**Permanent resistance change after 1,000 hours operating at RCWV, with duty cycle of (1.5 hours"on", 0.5 hour "off") at 70°C ±2°C ambient**
Resistance to Soldering Heat	**Resistance change rate is** **± (1% + 0.05 Ω) Max. with no evidence of mechanical damage.**	**Permanent resistance change when leads immersed to 3.2 to 4.8 mm from the body in 350°C ± 10°C solder for 3± 0.5 seconds.**
Solderability	**95 % coverage Min.**	**Test temperature of solder : 245 °C ± 3°C** **Dwell time in solder : 2 - 3 seconds**

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Mfg. Part No.	Resistance (Ohms)	Temperature Coefficient Tolerance	Wattage (W)	D + 1	L + 1	d + 0.05	H + 3
MCKNP03UJ010JB00	1	+/-50ppm/°C	3W	5.5 mm	13.5 mm	0.70 mm	28 mm
MCKNP03UJ010KB00	0.1	+/-90ppm/°C	3W				
MCKNP03UJ0100B00	10	+/-20ppm/°C	3W				
MCKNP03UJ0101B00	100	+/-20ppm/°C	3W				
MCKNP03UJ0102B00	1	+/-20ppm/°C	3W				
MCKNP03UJ0121B00	120	+/-20ppm/°C	3W				
MCKNP03UJ0122B00	1.2	+/-20ppm/°C	3W				
MCKNP03UJ0152B00	1.5	+/-20ppm/°C	3W				
MCKNP03UJ020JB00	2	+/-50ppm/°C	3W				
MCKNP03UJ020KB00	0.2	+/-90ppm/°C	3W				
MCKNP03UJ0201B00	200	+/-20ppm/°C	3W				
MCKNP03UJ0202B00	2	+/-20ppm/°C	3W				
MCKNP03UJ0221B00	220	+/-20ppm/°C	3W				
MCKNP03UJ0250B00	25	+/-20ppm/°C	3W				
MCKNP03UJ0251B00	250	+/-20ppm/°C	3W				
MCKNP03UJ0301B00	300	+/-20ppm/°C	3W				
MCKNP03UJ0302B00	3	+/-20ppm/°C	3W				
MCKNP03UJ0331B00	330	+/-20ppm/°C	3W				
MCKNP03UJ0400B00	40	+/-20ppm/°C	3W				
MCKNP03UJ0401B00	400	+/-20ppm/°C	3W				
MCKNP03UJ0402B00	4	+/-20ppm/°C	3W				
MCKNP03UJ0471B00	470	+/-20ppm/°C	3W				
MCKNP03UJ050JB00	5	+/-50ppm/°C	3W				
MCKNP03UJ050KB00	0.5	+/-90ppm/°C	3W				
MCKNP03UJ0500B00	50	+/-20ppm/°C	3W				
MCKNP03UJ0501B00	500	+/-20ppm/°C	3W				
MCKNP03UJ0502B00	5	+/-20ppm/°C	3W				
MCKNP03UJ0750B00	75	+/-20ppm/°C	3W				
MCKNP07SF100JB00	10	+/-20ppm/°C	7W	8.5mm	25mm	0.75mm	38mm
MCKNP07SF100KB00	1	+/-50ppm/°C	7W				
MCKNP07SF1000B00	100	+/-20ppm/°C	7W				
MCKNP07SF1002B00	10	+/-20ppm/°C	7W				
MCKNP07SF1500B00	150	+/-20ppm/°C	7W				
MCKNP07SF2000B00	200	+/-20ppm/°C	7W				
MCKNP07SF2500B00	250	+/-20ppm/°C	7W				
MCKNP07SF500JB00	50	+/-20ppm/°C	7W				
MCKNP0ASF100JB00	10	+/-20ppm/°C	10W		53mm		
MCKNP0ASF100KB00	1	+/-50ppm/°C	10W				
MCKNP0ASF1000B00	100	+/-20ppm/°C	10W				
MCKNP0ASF150JB00	15	+/-20ppm/°C	10W				
MCKNP0ASF200KB00	2	+/-50ppm/°C	10W				
MCKNP0ASF300JB00	30	+/-20ppm/°C	10W				
MCKNP0ASJ010KB00	1	+/-50ppm/°C	10W				

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