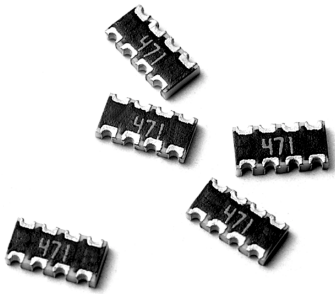


Thick Film  
Chip Resistors Network

# TC Series

[ For 8Pin/4R ]

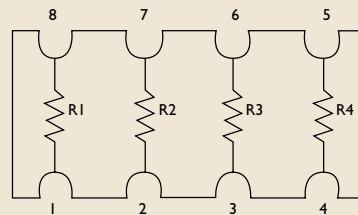


## APPLICATIONS

Telecommunication Equipment Lap-Top and Note-Book Computer

## SCHEMATICS

TC16

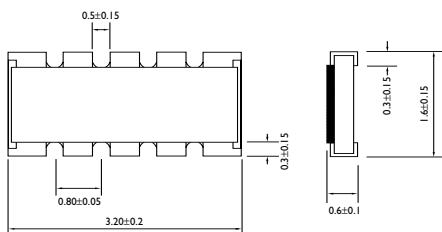


$R1=R2=R3=R4$

## DIMENSIONS

Unit : mm

TC16



Note :

---



---



---



---



---



---



---



---

### ELECTRICAL CHARACTERISTICS

STYLE	TC16
Power Rating at 70°C	1/16W
Operating Temp. Range	-55°C to +125°C (Derated to 0 Load at +125°C)
Maximum Working Voltage	50V
Maximum Overload Voltage	100V
Dielectric Withstand Voltage	100V
Number of Resistors	4
Resistance Range	10Ω ~ 1MΩ
Temperature Coefficient	±200ppm/°C
Resistance Tolerance	±5%

### ENVIRONMENTAL CHARACTERISTICS

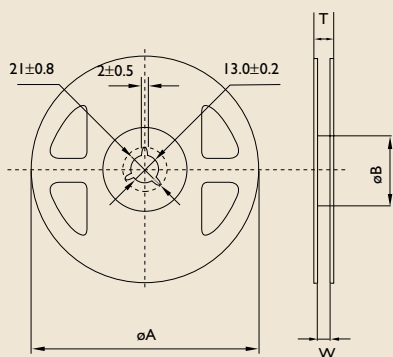
PERFORMANCE TEST	TEST METHOD	TEST METHOD	APPRAISE
Temperature Coefficient	MIL-STD-202F, Method 304	-55°C to +125°C	±200ppm/°C
Thermal Shock	MIL-STD-202F, Method 107	5 Cycles, -55°C to +125°C (Step by Step 2min.)	±(1%+0.05Ω)
Low Temperature Operation	MIL-R-55342D, Para.4.7.4	One Hour at -65°C Followed by 45 Minutes RCWW	±(1%+0.05Ω)
Short Time Overload	MIL-R-55342D, Para.4.7.5	2.5 Times RCWW for 5 Seconds	±(2%+0.05Ω)
Insulation Resistance	MIL-STD-202F, Method 302	RCOV for 1 Minute	> 10GΩ
Dielectric Withstand Voltage	MIL-STD-202F, Method 301	R.M.S. for 1 Minute	by Type
Resistance to Soldering Heat	MIL-STD-202F, Method 210C	Soldered to Test Board at 260°C for 10 Seconds	±(1%+0.05Ω)
Moisture Resistance	MIL-STD-202F, Method 106F	42Cycles.Total 1000 Hours	±(2%+0.05Ω)
Life	MIL-STD-202F, Method 108A	1000 Hours at 70°C RCWW Intermittent	±(3%+0.1Ω)
Solderability	MIL-STD-202F, Method 208G	230°C for 5 Seconds	>95% Coverage
Bending Strength	JIS-C-5202, Para.6.1.4 Unit Mounted in Center of 90mm Board Length, Deflected 1mm in Either Direction for 5 Seconds		±(1%+0.05Ω)



Note :

## TAPING REEL

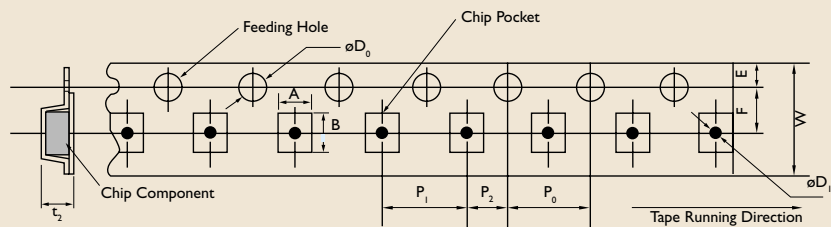
Unit : mm



STYLE	PACKAGING	TAPE WIDE	øA	øB	W	T
YC12/YC15/YC16/TC16 YC17	Paper	8mm	180 <sup>+0</sup> <sub>-3</sub>	60 <sup>+1</sup> <sub>-0</sub>	9.0±0.3	11.4±1
YC24/YC32/YC35	Embossed	12mm	180 <sup>+0</sup> <sub>-3</sub>	60 <sup>+1</sup> <sub>-0</sub>	13.0±0.3	15.4±1

## EMBOSSED TAPING

Unit : mm

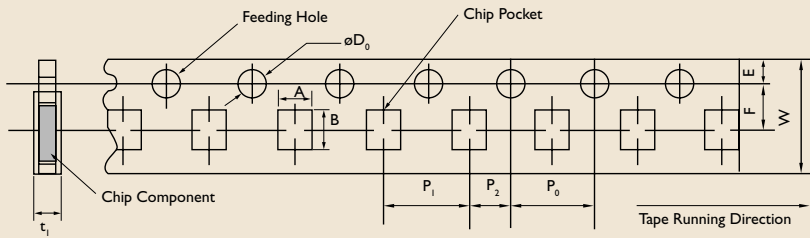


STYLE	NO. OF RES.	A	B	W	E	F	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	øD <sub>0</sub>	øD <sub>1</sub>	t <sub>2</sub>
YC24	8	1.8±0.2	4.4±0.2	12±0.3	1.75±0.1	5.5±0.05	4±0.1	4±0.1	2±0.05	1.5±0.1	1.5±0.25	1.0±0.1
YC32	4	3.5±0.2	5.6±0.2	12±0.3	1.75±0.1	5.5±0.05	4±0.1	4±0.1	2±0.05	1.5±0.1	1.5±0.25	1.0±0.1
YC35	8	3.5±0.2	6.7±0.2	12±0.3	1.75±0.1	5.5±0.05	4±0.1	4±0.1	2±0.05	1.5±0.1	1.5±0.25	1.0±0.1

Note :

### PAPER TAPING

Unit : mm



STYLE	NO. OF RES.	A	B	W	E	F	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>	øD <sub>0</sub>	t <sub>1</sub>
YC12	4	1.2±0.1	2.2±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	2.0±0.1	2.0±0.05	1.5 <sup>+0.1</sup> <sub>0</sub>	0.7±0.1
YC15/YC17	8	2.0±0.1	3.6±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	4.0±0.1	2.0±0.05	1.5 <sup>+0.1</sup> <sub>0</sub>	0.85±0.1
YC16/TC16	4	2.0±0.1	3.6±0.1	8.0±0.2	1.75±0.1	3.5±0.05	4.0±0.1	4.0±0.1	2.0±0.05	1.5 <sup>+0.1</sup> <sub>0</sub>	0.85±0.1

### PACKING METHODS

Unit : pcs

STYLE	PACKING	7"(178mm)	
		PAPERTAPING REEL (R)	EMBOSSSED TAPING REEL (K)
YC12	10,000		-
YC16/TC16	5,000		-
YC15/YC17	5,000		-
YC24/YC32/YC35	-		4,000

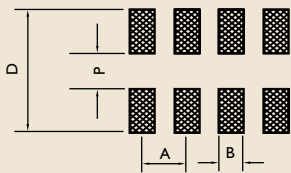


Note :

## RECOMMENDED LAND PATTERN DESIGN

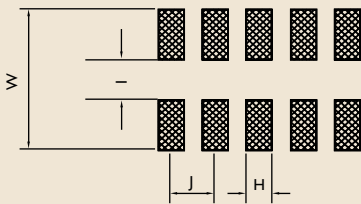
Unit : mm

### For Popular Pattern



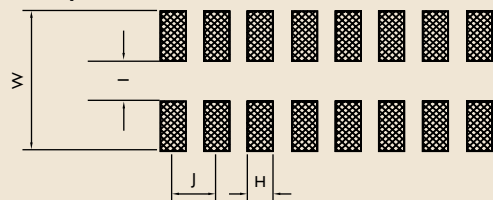
STYLE	A	B	D	P
YC12	0.5±0.05	0.3±0.05	2.2±0.2	0.5±0.1
YC16/TC16	0.80±0.05	0.45±0.05	2.8±0.2	0.8±0.1
YC32	1.27±0.05	0.6±0.05	4.5±0.2	2.0±0.1

### For Popular Pattern



STYLE	J	H	W	I
YC15/YC17	0.64±0.05	0.3±0.05	2.8±0.2	0.8±0.1
YC35	1.27±0.05	0.6±0.05	4.5±0.2	2.0±0.1

### For Popular Pattern



STYLE	J	H	W	I
YC24	0.5±0.05	0.3±0.05	2.8±0.2	0.9±0.1