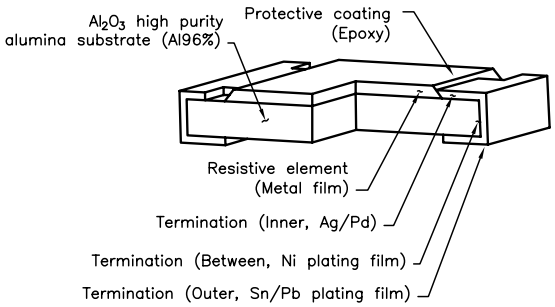
multicomp

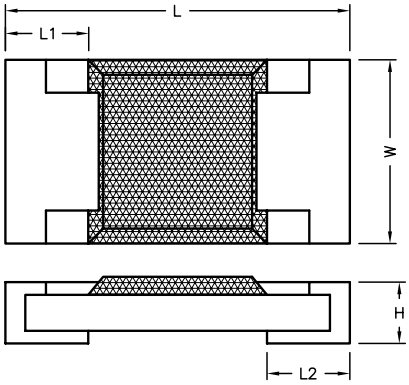
SPC-F005.DWG

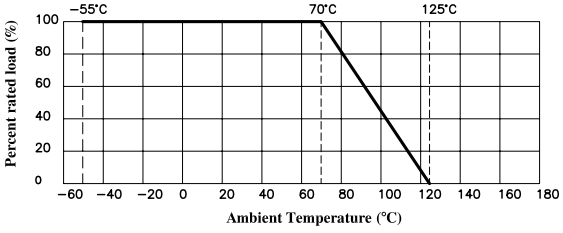
REVISIONS

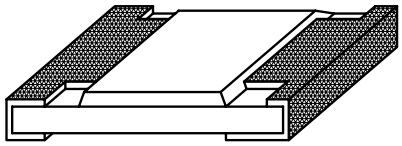
DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1861	A	RELEASED	BYF	11/06/05	HO	11/7/05	JWM	11/7/05









Specifications:

- Temperature Range: −55°C ~ +125°C
- Ambient Temperature: 70°C
- Tolerance: ±1%
- Value Range: E-24 Series, 100 each of 121 values (see chart)

Multicomp Type No.	Case Size	Power Rating @ 70°C (Watt)	Max. Working Voltage (V)	Max. Overload Voltage (V)	Dimensions				
					L	W	H	L1	L2
MC0402WGFE024KIL	0402	0.0625	25	50	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10
MC0603WGFE024KIL	0603	0.0625	50	100	1.60±0.10	$0.80^{+0.15}_{-0.10}$	0.45±0.10	0.30±0.20	0.30±0.20
MC0805WAFE024KIL	0805	0.10	150	300	2.00±0.15	$1.25^{+0.15}_{-0.10}$	0.55±0.10	0.40±0.20	0.40±0.20
MC1206W8FE024KIL	1206	0.125	200	400	3.10±0.15	$1.55^{+0.15}_{-0.10}$	0.55±0.10	0.45±0.20	0.45±0.20

RoHS Compliant

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
BASAM YOUSIF	11/06/05
CHECKED BY:	DATE:
HISHAM ODISH	11/7/05
APPROVED BY:	DATE:
JEFF MCVICKER	11/7/05

DRAWING TITLE: **RoHS Compliant Resistor Binder Kits, SMD, E24 Series, 121 Values, 1%**

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	TA-680	TA-680.DWG	A

SCALE: NTS | U.O.M.: Millimeters | SHEET: 1 OF 2

Performance specifications

Characteristics	Limits	Test Methods (JIS - C - 5202)
Temperature coefficient	10Ω ~ 100Ω ≦ ± 200 PPM/°C 101Ω ~ 1MΩ ≦ ± 100 PPM/°C Note: Range for type '0402' starts from 100Ω ~ 1MΩ only	5.2 Natural resistance change per temp. degree centigrade $\frac{R2-R1}{R1(t2-t1)} \times 10^6$ (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: ± (1.0% + 0.1Ω) Max.	5.5 Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds
Insulation resistance	1,000 MΩ or more	5.6 Apply 500V DC between protective coating and termination for 1 min, then measure
Dielectric withstanding voltage	No evidence of flashover mechanical damage, arcing or insulation break down	5.7 Apply 500V AC between protective coating and termination for 1 minute
Terminal bending	± (1.0% + 0.05Ω) Max.	6.1.4 Twist of Test Board: Y/X = 5/90 mm for 10 seconds
Temperature cycling	± (0.5% + 0.05Ω) Max.	7.4 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: -125°C ±2°C, 30 mins Step 4: Room temp., 10 ~ 15 mins
Load life in humidity	Resistance change rate is ± (1.0% + 0.1Ω) Max.	7.9 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 ± (1.0% + 0.1Ω) Max.	7.10 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
Soldering Heat	Electrical characterisstics shall be satisfied. Wthout distinct deformation in appearance.	Solder bath method Pre-heat: 100 to 105°C, 30 ± 5 sec Temperature: 265 ± 3°C, 5 + 1/-0 sec. Reflow soldering method Peak: 250 + 5/-0°C, 230 °C or higher, 30 ± 10 sec. soldering iron method Bit temperature: 350 ± 10°C Application time of soldering iron : 3+ 1/-0 sec.
Solderability	95 % coverage Min.	6.5 Test temperature of solder : 245°C ±3°C Dipping them solder : 2 ~ 3 seconds

Values Included in each kit

Value	Value	Value
0R	470R	24K
10R	510R	27K
11R	560R	30K
12R	620R	33K
15R	680R	36K
16R	750R	39K
18R	820R	43K
20R	910R	47K
22R	1K	51K
24R	1K1	56K
27R	1K2	62K
30R	1K3	68K
33R	1K5	75K
36R	1K6	82K
39R	1K8	91K
43R	2K	100K
47R	2K2	110K
51R	2K4	120K
56R	2K7	130K
62R	3K	150K
68R	3K3	160K
75R	3K6	180K
82R	3K9	200K
91R	4K3	220K
100R	4K7	240K
110R	5K1	270K
120R	5K6	300K
130R	6K2	330K
150R	6K8	360K
160R	7K5	390K
180R	8K2	430K
200R	9K1	470K
220R	10K	510K
240R	11K	560K
270R	12K	620K
300R	13K	680K
330R	15K	750K
360R	16K	820K
390R	18K	910K
430R	20K	1M
	22K	

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