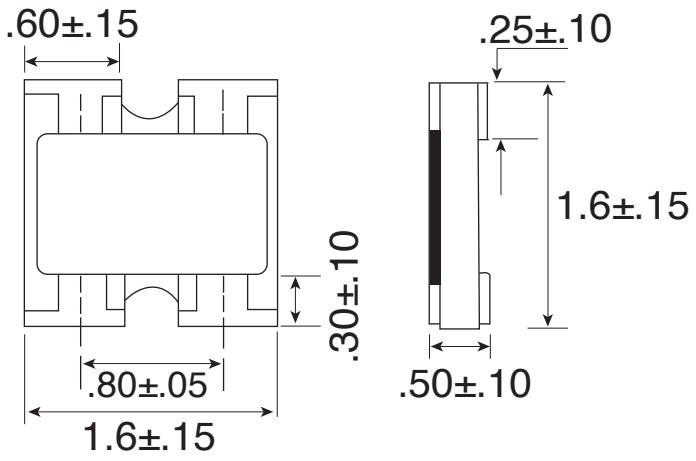
XICON™ Passive Components

# 5% Thick Film Chip Resistor Array - Convex Terminal Series

## 302-TFRA2 Series

***Date Last Revised: 1/21/20***

**DIMENSIONS: mm**



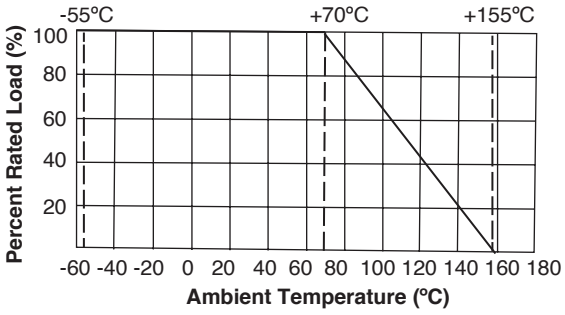

## PART NUMBERING SYSTEM

| 3 | 0 | 2 | - | T | F | R | A | 2 | - | 5 | - | 1 | 0 | 0 | - | R | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prefix | | | | Series | | | | | | Tolerance | | Value | | | | Suffix (RoHS Compliant) | |

## SPECIFICATIONS :

| | |
|---|---|
| Power Rating (Watts) | 0.0625W(1/16W) |
| Max.Working Voltage | 50V |
| Max.Overload Voltage | 100V |
| Dielectric Withstanding Voltage | 100V |
| Temperature Range | -55°C~+155°C |
| Ambient Temperature | 70°C |

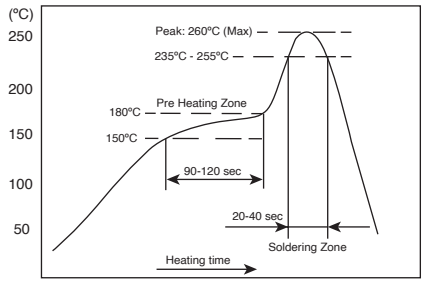
**DERATING CURVE**




**NOTES :**

- Nominal Resistance
  Effective figures of nominal resistance shall be in accordance :
  - •E-24 and E-96 series for 1%
  - •E-24 series for 2% and 5%
- •Resistance Range : 10Ω ~1MΩ
- •RoHS Compliant

# 5% Thick Film Chip Resistor Array-Convex Terminal

| **Characteristics** | **Limits** | **Test Methods** ( JIS C 5201-1 ) |
|---|---|---|
| Temperature coefficient | Refer to item 5 | Natural resistance change per temp. degree centigrade.<br>$\frac{R_2-R_1}{R_1(t_2-t_1)}$ x$10^6$ (PPM/°C)<br>$R_1$: Resistance value at room temperature ($t_1$)<br>$R_2$: Resistance value at room temp.plus 100°C ($t_2$) (Sub-clause 4.8) |
| Short time overload | Resistance change rate is<br>± 5%(2.0 % + 0.1Ω) Max.<br>±1%(1.0 % + 0.1Ω) Max. | Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds. |
| Insulation resistance | 1,000M Ω or more | Apply 500V DC between protective coating and termination for 1 minute, then measure |
| Dielectric withstanding Voltage | No evidence of flashover mechanical damage,arcing or insulation break down | Clamped in the trough of a 90° metallic V-block and shall be tested at AC potential respectively specified in the table 1.for 60+10/-0 secs. |
| Terminal bending | Resistance change rate is<br>±(1.0% +0.05Ω) Max | Twist of Test Board:<br>Y/X=5/90mm for 10 seconds |
| *Solderability | 95% coverage Min. | Test temperature of solder: 245 ± 3ºC<br>Dipping them solder: 2-3 seconds<br>(Sub-clause 4.17) |
| Soldering temp. reference | Electrical characteristics shall be satisfied.<br>Without distinct deformation in appearance.<br>(95% coverage Min.) | **Wave soldering condition:** (2 cycles Max.)<br>Pre-heat: 100 ~ 120 ºC, 30 ± 5 sec.<br>Suggestion solder temp.: 235 ~ 255 ºC, 10 sec. (Max.)<br>Peak temp.: 260ºC<br><br>**Reflow soldering condition:** (2 cycles Max.)<br>Pre-heat: 150 ~ 180 ºC, 90 ~ 120 sec.<br>Suggestion solder temp.: 235 ~ 255 ºC, 20 ~ 40 sec.<br>Peak temp.: 260ºC<br>  <br><br>Temperature profile for evauation<br><br>**Hand soldering condition:**<br>The soldering iron tip temperature should be less than 300ºC and maximum contract time should be 5 sec. |

# Mouser Electronics

Authorized Distributor

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Xicon:

302-TFRA2-5-150K-RC 302-TFRA2-5-10K-RC 302-TFRA2-5-220-RC 302-TFRA2-5-47K-RC 302-TFRA2-5-2.4K-RC 302-TFRA2-5-100K-RC 302-TFRA2-5-4.7-RC 302-TFRA2-5-4.7K-RC 302-TFRA2-5-470K-RC 302-TFRA2-5-470-RC 302-TFRA2-5-100-RC 302-TFRA2-5-10-RC 302-TFRA2-5-2.2K-RC 302-TFRA2-5-200-RC 302-TFRA2-5-5.1-RC 302-TFRA2-5-15K-RC 302-TFRA2-5-15-RC 302-TFRA2-5-1K-RC