UR

Cylindrical Ultra High Ohmic Resistors,
Thick film, Non-Inductive

Ultra High Ohmic High Voltage High Frequency Resistors GΩ, TΩ

3RLAB offers UR - series to Ultra High Ohmic of requirements at reasonable prices,
An epoxy conformal coat, which is very good humidity protection, good Voltage of Coefficient.

UR Precision High OHmic Resistors, the main usage;

UR-series of resistors are desinged to help provide current pulse limiting, detection of trickle current .
Tolerance : 0.5%, 1%, 2%, 5%, 10%, 20%

* Resistance rating : 1GΩ to 100TΩ
* NCR design : Non-contact resistance design between resistives and termination cap, there is 3RLab's unique of conductive pad.

Model Nr.	1)Wattage	**Max. Continuous Oper. Volt[kV]	Impulse Voltage 1.2/50μSec	Resistance [ohm]		SMD type	Dimensions in millimeters (inches)		
				Min	Max		A	B	C
UR1	0.5	2	4	0.7G	50G	N/A	15.0+/-1.5 (0.590)	5.0+/-1.5 (0.197)	0.8
UR1.7	0.7	5	10	0.7G	1T	N/A	25.4+/-1.5 (1.000)	5.0+/-1.5 (0.197)	0.8
UR2	1.0	5	10	0.7G	1T	available	24.0+/-1.5 (0.944)	8.0+/-1.0 (0.314)	1.0
UR2.5	1.5	10	20	1.0G	10T	available	39.0+/-1.5 (1.500)	8.0+/-1.0 (0.314)	1.0
UR3	2.0	12	24	1.0G	10T	available	52.0+/-1.5 (2.040)	8.0+/-1.0 (0.314)	1.0

+ Custom dimension & Ohnic Value available upon request (100TΩ available on UR3 as custom requirement)
1) Wattage in 25 °C.
2) Vdc, Vrms.
** Single impulse standard.

Temperature Coerricient	R-Range	1GΩ to 9GΩ	10GΩ to 300GΩ	400GΩ to 1TΩ	1.1TΩ to 10TΩ		ΔR taken at 25°C and 70°C
	[ppm/°C]	200	300	1000	1500		
Voltage Coefficient	R-Range	10GΩ to 19GΩ	20GΩ to 100GΩ	200GΩ to 1TΩ	10TΩ		Measured at 100Vdc and 1000Vdc
	VCR	0.002%/V	0.007%/V	0.01%/V	0.05%/V		
Resistance Tolerance [%]	R-Range	1GΩ	2GΩ~10GΩ	20GΩ~100GΩ	200GΩ~1TΩ	10TΩ	Measured at 1000Vdc Standard
	Std.	+/-1%(F)	+/-2%(G)	+/-5%(J)	+/-10%(K)	+/-20%	
	Custom	+/-0.5	+/-1%	+/-2%	+/-5%	+/-10%	

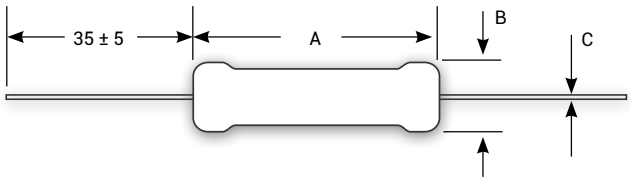
3RLab
303 Hyundai I Valley ,149 Gongdanro, Gunpo City, Gyeonggido, Korea
VOICE. +82-31-429-6379 **FAX.** +82-31-429-9127 **UPDATE** 2021-12-28
info@3RLab.com www.3RLab.com 3RLab,Inc.

RoHS COMPLIANT

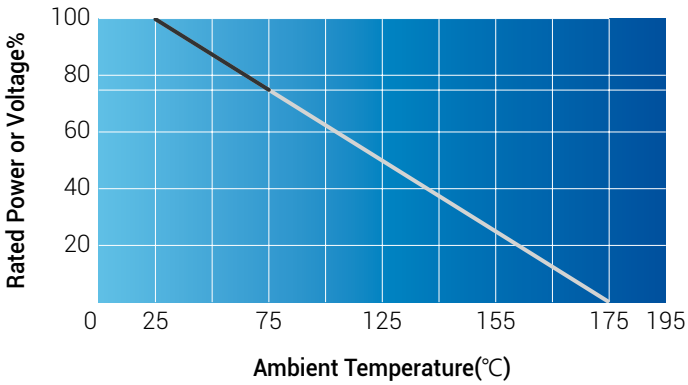
UR

Cylindrical Ultra High Ohmic Resistors,
Thick film, Non-Inductive

DIMENSIONS [mm]



DERATING CURVE



SPECIFICATIONS

ENDURABLE HARSH TO ENVIRONMENT (TEMPERATURE)	-55ºC to +195°C Max. broken temperature of resistives is 600ºC. (for 70min.)
THERMAL SHOCK	Mil-Std-202, Method- 107, Cond. C, ΔR 0.50% max.
LOAD LIFE	1,000 hours at rated power ΔR 0.7% max.
INSULATION RESISTANCE	10,000MΩ Min.
CAP & LEAD OF MATERIAL	Tinned Cap, tinned copper wire.
ENCAPSULATION	Anti-humidity Epoxy conformal coat.
RESISTIVE MATERIAL	Thick Film.
CONTACT METHOD BETWEEN RESISTIVES AND TERMINATION CAPS	Individual Conductive Pads. So, called “NCR” Non-contact resistance.

cf.: The described specifications & dimensionss subject to change without notice.

3RLab

303 Hyundai I Valley ,149 Gongdanro, Gunpo City, Gyeonggido, Korea
VOICE. +82-31-429-6379 **FAX.** +82-31-429-9127 **UPDATE** 2021-12-28
info@3RLab.com www.3RLab.com 3RLab,Inc.

RoHS COMPLIANT