

Cylindrical High Voltage Resistors,
Thicker film, Non-Inductive



High Voltage High Frequency Resistors for various High Voltage Applications

3RLAB offers HTE series for high voltage usages at reasonable prices.

HTE is coated with epoxy which has excellent humidity protection, a wide range of tolerances, and TCR



HTE Precision High Voltage Resistors, The main usage ;

Epoxy coating for excellent humidity protection

Resistance tolerance: 0.5%, 1%, 2%, 5%

Main application: HV energy Capacitors's charger&discharger,
various HV Loads, HV Snubber, HV damping, on HV diodes, R-C tank,
in Ion gun's termination, etc...

* Resistance rating : 1kΩ to 100MΩ

* Power Ratings up to 15 Watt.

* Various Models with Voltage Ratings from 2.5kV to 48kV in free air.

* N.C.R. design : Non-contact resistance design between resistives and termination cap, put on 3RLab's unique conductive pad.



Model Nr.	Wattage	**Max. Continuous Oper. Volt[kV]	Std. Resistance [ohm]		Dimensions in millimeters (inches)			SMD type
			Min.	Max.	A	B	C	
HTE15	0.7	2.5	1K	100M	15+/-1.5 (0.590)	5.0+/-1.5 (0.197)	0.8	N/A
HTE19	1.0	3.5	1K	100M	19+/-1.5 (0.748)	5.0+/-1.5 (0.197)	0.8	N/A
HTE25	1.2	5.5	1K	100M	25.4+/-1.5 (0.984)	5.0+/-1.5 (0.197)	0.8	N/A
HTE24	2.0	5.5	1K	100M	24.0+/-1.5 (0.940)	8.0+/-1.0 (0.314)	1.0	available
HTE29	2.4	7.0	1K	100M	29.0+/-1.5 (1.141)	8.0+/-1.0 (0.314)	1.0	available
HTE39	3.0	10.0	1K	100M	39.0+/-1.5 (1.535)	8.0+/-1.0 (0.314)	1.0	available
HTE52	5.0	15.0	1K	100M	52.0+/-1.5 (2.047)	8.0+/-1.0 (0.314)	1.0	available
HTE76	7.5	22.5	2K	100M	76.0+/-1.5 (2.992)	8.0+/-1.0 (0.354)	1.0	available on request
HTE102	10.0	32.0	2K	100M	102.0+/-1.5 (4.015)	9.0+/-1.0 (0.354)	1.0	N/A
HTE127	12.0	40.0	2K	100M	127.0+/-1.5 (5.000)	9.0+/-1.0 (0.354)	1.0	N/A
HTE152	15.0	48.0	2K	100M	152.0+/-1.5 (5.984)	9.0+/-1.0 (0.354)	1.0	N/A

* Custom dimensions & specifications are available upon request

* Above mentioned Electrical specifications applicable for 0.1MΩ to 100MΩ only

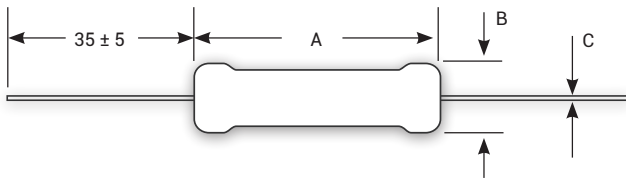
* Voltage is restricted by rated power

* Vdc, Vrms standard. And at 1.2/50μs impulse; std. Voltage x 1.5 times available

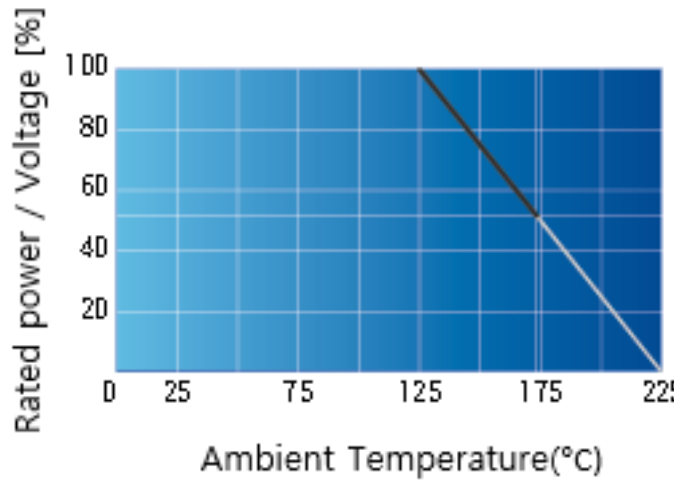
HTE

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DIMENSIONS [mm]



DERATING CURVE



SPECIFICATIONS

RESISTANCE TOLERANCE	1% 2% 5% ,and 0.5%..And (from 1kΩ to 100MΩ ; 0.1%, 0.25% special order available upon request, *but some parts are unable to special tolerance)
HARSH ENVIRONMENT ENDURANCE (TEMPERATURE)	-55°C to +195°C , Max. Resistance breaks down at a temperature of 600°C (for 70 mins)
TEMPERATURE COEFFICIENT OF RESISTANCE	100ppm/°C standard referenced to 25°C, from -25°C to +125°C. (80ppm/°C and special TCR upon request)
OVERLOAD/VOLTAGE	5 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds ΔR 0.5% max.
THERMAL SHOCK	Mil-Std-202, Method- 107, Cond. C, ΔR 0.25% max.
LOAD LIFE	1,000 hours at rated power ΔR 0.7% max.
MOISTURE RESISTANCE	Mil-Std-202, Method 106, ΔR 0.4% max.
LEAD MATERIAL	Tin-plated copper solderable semi-flexible axial wire
INSULATION RESISTANCE	10,000MΩ Min.
TERMINATION CAP OF MATERIAL	Tin Cap.
ENCAPSULATION	Epoxy conformal coating
RESISTIVE MATERIAL	Thicker Film
CONTACT METHOD BETWEEN RESISTIVES AND TERMINATION CAPS	Individual Conductive Pad called "NCR" Non-contact resistance



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HTE SERIES: APPLICATION GUIDE

- Automated Test (ATE)
- Medical (Imaging)
- Ion Source
- Chromatography (Gas)
- Medical (Radiation Therapy)
- Military, Radar, Laser, Plasma
- Measurement (High Voltage)
- HV Capacitors Charging, Discharging
- Electric Power Transmission High Voltage
- Medical (Blood Analyzers)
- Corona Generators
- Multichannel Analyzers
- Ozone Generating
- Detectors
- Nuclear Instrumentation
- Electron Beam
- Pulse Generators
- Surface Analysis
- CT, MRI
- Electrophoresis
- Image Intensifier
- Surface Analysis
- Piezo. Focusing (Poling)
- High Voltage Dividers
- Stress Testing
- Klystron, Magnetron, Microwave

cf. The highlighted specifications & dimensions may be subject to change without notice



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