

# NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS

(2322 644 90005)

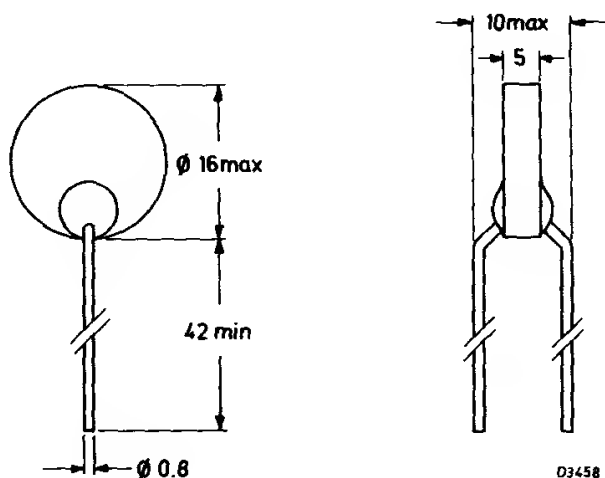
# VA1104

This data sheet should be read in conjunction with  
NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS - INTRODUCTORY NOTES

## APPLICATION

For diode and switch protection in colour television receivers.

## DIMENSIONS (millimetres)



## ELECTRICAL DATA

Rated zero power resistance ( $R_{25}$ )	B-value ( $B \frac{25}{85}$ ) (approx.)	Code No.	Type No.
min. 15 $\Omega$	3350K	2322 644 90005	VA1104

Maximum current (r. m. s.) at $T_{amb} = 55^{\circ}\text{C}$	2.2	A
Maximum resistance at $T_{amb} = 25^{\circ}\text{C}$ , $I_{r. m. s.} = 2.2\text{A max.}$	1	$\Omega$
Operating temperature category at zero power	-25 to +155	$^{\circ}\text{C}$
at maximum power	0 to +55	$^{\circ}\text{C}$
Dissipation factor ( $\delta$ ) approx.	17	mW/degC
Thermal time constant ( $\tau$ ) approx.	148	s
Maximum repetitive peak voltage (50 to 60Hz)	380	V

**Mullard**

## MOUNTING

The thermistor should be mounted to allow free circulation of air around it, and at least 10mm from a printing-wiring board.

## ORDERING PROCEDURE

The thermistor should be ordered by the type or code number quoted in the table. They may be supplied in packs marked with either type or code number.

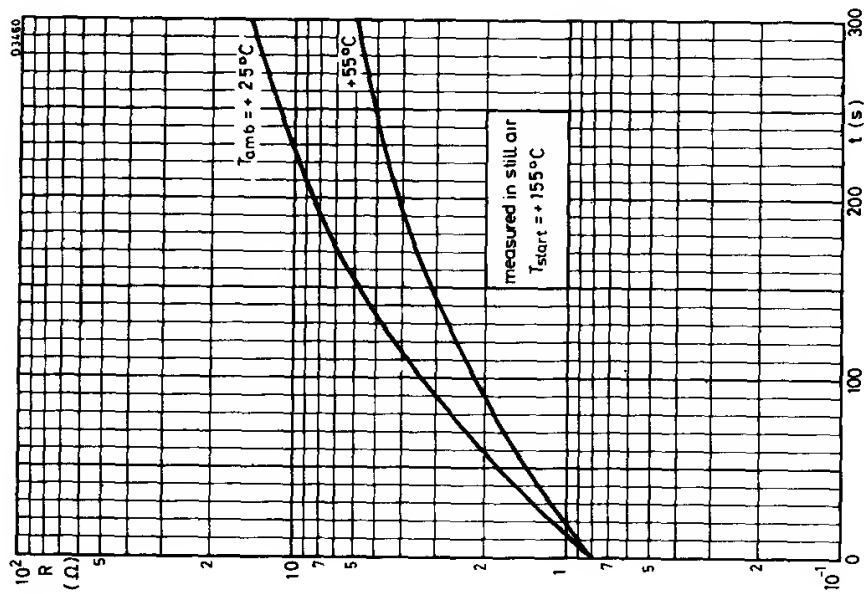
## TESTS AND REQUIREMENTS

Tests	IEC68 test method only	Duration	Requirements $\Delta R/R_{25}(\%)$
Cold at $-25^{\circ}\text{C}$	A	1000h	$\pm 10$
Storage at $+25^{\circ}\text{C}$	Ha	1000h	$\pm 10$
Dry heat $+155^{\circ}\text{C}$	B	1000h	$\pm 20$
Thermal shock $-25$ to $+155^{\circ}\text{C}$	Na	5 cycles	$\pm 20$
Damp heat at $+40^{\circ}\text{C}$	Ca	1000h	$\pm 15$
Maximum current at $T_{\text{amb}} = +25^{\circ}\text{C}$		1000h	$\pm 20$
Cycling			
quick		250 cycles 5s on/5s off	$\pm 20$
slow		2000 cycles 1 min on/9 min off	$\pm 20$
Robustness of terminations	U		Leads should neither come loose nor break
tensile strength 20N	Ua	10s	
bending 10N	Ub	2 times	
Soldering	T		Leads must be solderable with solder containing resin flux, initially, and after six months storage
solderability at $230 \pm 10^{\circ}\text{C}$	para 3.2.3	3 to 4s	
resistance to heat at $230 \pm 10^{\circ}\text{C}$	para 3.2.4	3 to 4s	$\pm 2$

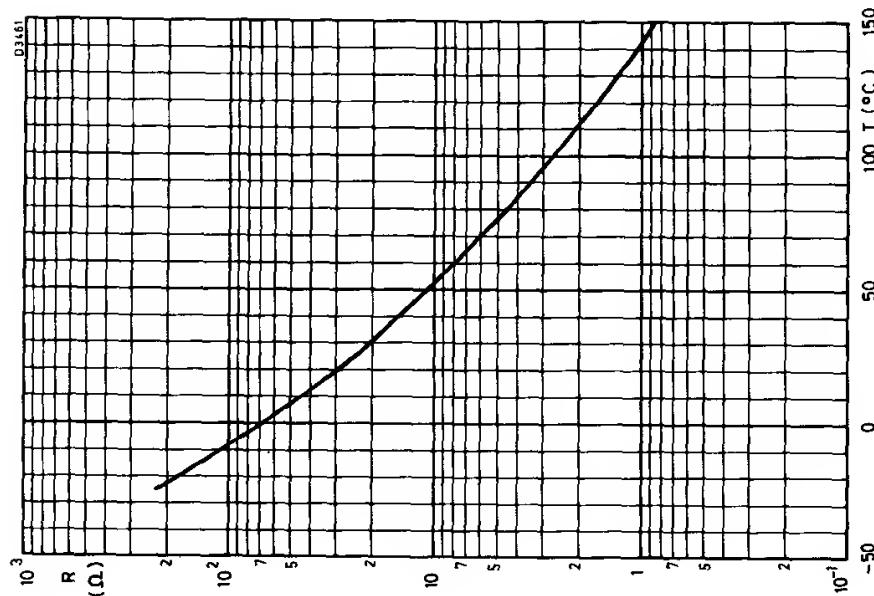
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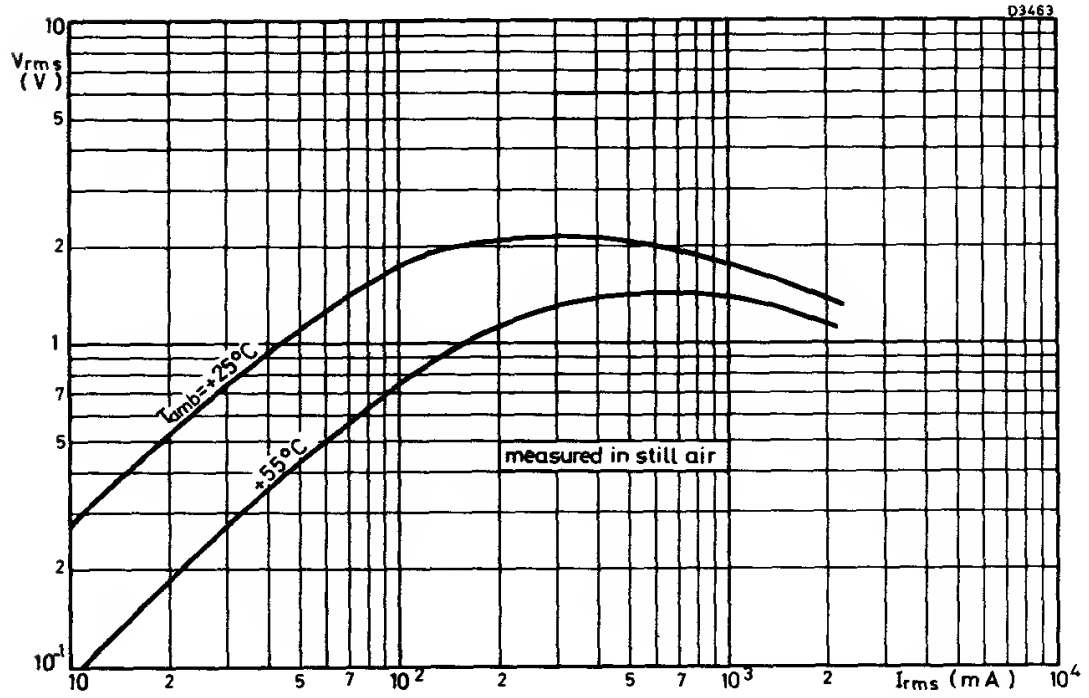
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COOLING CHARACTERISTICS



RESISTANCE/TEMPERATURE CHARACTERISTIC



VOLTAGE/CURRENT CHARACTERISTICS