PTC thermistors for degaussing 2322 662 96...

FEATURES

- Residual currents as low as 1 mA, ideal for high-resolution displays
- Long decay time
- Stable performance over a long time
- Non-flammable (*"UL 94.V.0"*)
- Design-in support available.

APPLICATIONS

- Colour televisions
- Colour monitors.

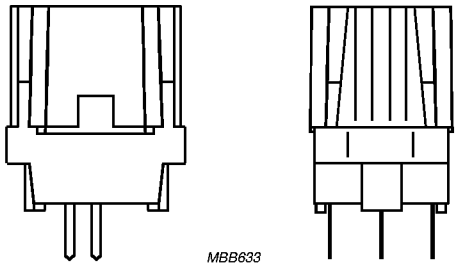


Fig.1 Component outline.

DESCRIPTION

For good picture definition, colour televisions and monitors must be degaussed by a strong alternating magnetic field which gradually and symmetrically decays to a small value of residual current. This can be achieved by connecting a PTC thermistor in the degaussing circuit.

The new generation of flat-screen, high-definition colour televisions and monitors require an excellent picture quality with high colour purity. This can only be achieved by a dual PTC device housing two PTC thermistors in intimate thermal contact, one being used to heat the other and so further reduce the residual current.

MARKING

If assembled in Belgium the thermistors are marked with the following information:

- The last five digits of the catalogue numbers
- Manufacturer's code of identification
- Date of manufacture, 5 digits denoting year, week and day number (yywwd).

QUICK REFERENCE DATA

PARAMETER	VALUE
Solderability	≤4 s at 240 °C
Resistance to heat	≤11 s at 265 °C
Operating temperature range:	
at zero power	−25 to +125 °C
at maximum voltage	0 to 60 °C
Drop test:	
height of free fall	1 m

If assembled in Singapore the thermistors are marked with the following information:

- Manufacturer's code of identification
- The last five digits of the catalogue numbers
- Assembler (SP)
- Date of manufacture, 5 digits denoting year, week and day number (yywwd).

PACKAGING

The thermistors are supplied in cardboard boxes, each box containing 600 units.

CAPABILITY

According to customer requirements, the following three ranges are available:

Standard range:

Minimum inrush current <25 A (p-p) with typical coil.

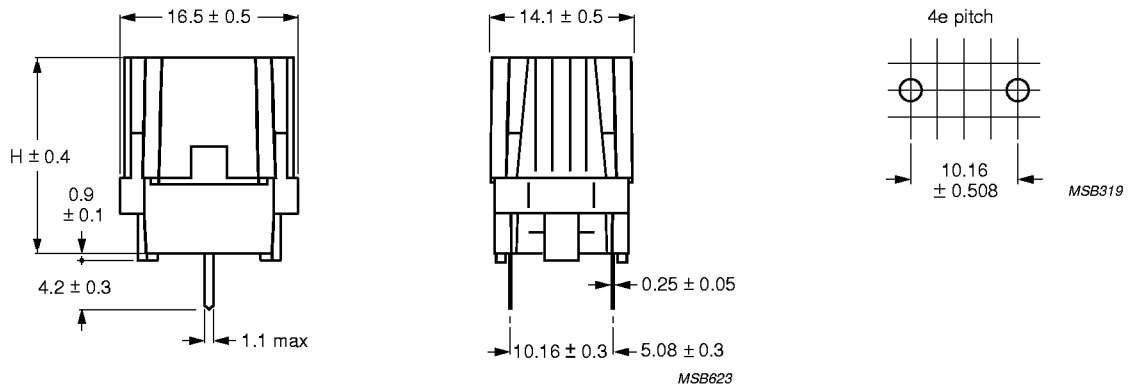
High inrush range:

Minimum inrush current >25 A (p-p) with typical coil.

Long decay:

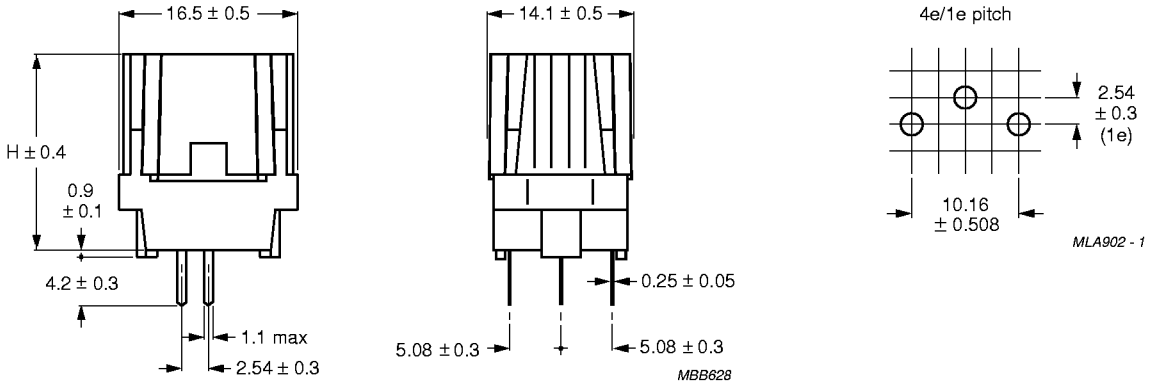
Typical decay time >70 ms with typical coil.

MECHANICAL DATA



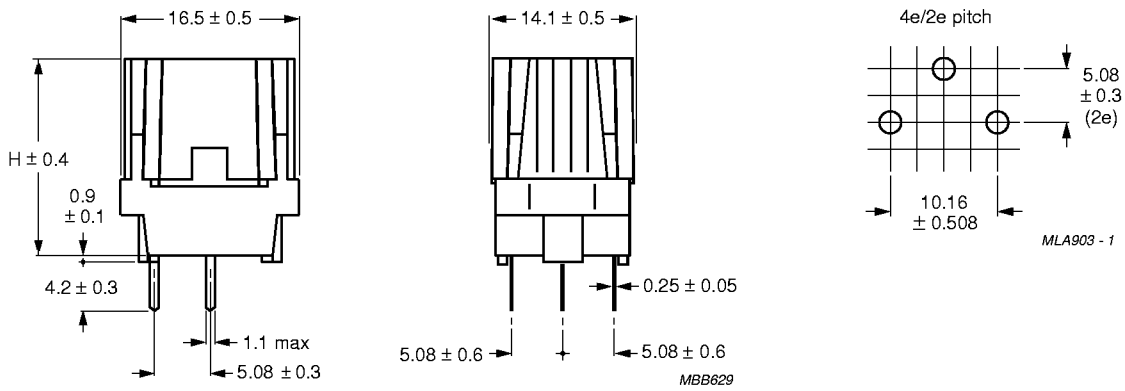
Dimensions in mm.
For low cap housing, H = 18.4 mm.
For high cap housing, H = 20.4 mm.

Fig.2 Mono PTC pin configuration 4e pitch.



Dimensions in mm.
For low cap housing, H = 18.4 mm.
For high cap housing, H = 20.4 mm.

Fig.3 Dual PTC pin configuration 4e/1e pitch.



Dimensions in mm.
For low cap housing, H = 18.4 mm.
For high cap housing, H = 20.4 mm.

Fig.4 Dual PTC pin configuration 4e/2e pitch.

ELECTRICAL DATA AND ORDERING INFORMATION

Dual Range

Table 1 Electrical data and catalogue numbers. Preferred types in **bold**.

CATALOGUE NUMBER 2322 662 ..... notes 1, 2 and 3	MINIMUM PEAK-TO-PEAK INRUSH CURRENT (A)		MAXIMUM PEAK-TO-PEAK RESIDUAL CURRENT (after 180 s) (mA)		R_{25} (Ω)	R_{coil} (Ω)		U_{max} (RMS) (V)	REPLACED CATALOGUE NUMBER 2322 662 .....
	220 V (AC)	110 V (AC)	220 V (AC)	110 V (AC)		MIN.	TYP.		
Standard inrush current									
96209; 96X09	11	5.2	4	2	30	17	25	276	96009
96211; 96X11	14	6.6	2	2	26	14	17	276	96011 96111
96216; 96X16	16	7.2	4	2	22	14	17	276	96016
96624; 96Y24	20	9.0	2	2	18	10	13	276	96124 96524
96Y02	25	12	4	4	14	10	10	276	96502
96X13	–	22	–	10	7	3	5	145	96013 96125
Long decay									
96Y08	20	10	10	10	9	17	20	276	–
96Y16	16	7.2	2	2	22	14	17	276	96116
96Y26	18	8.2	2	2	18	13	17	276	96123 96126 96526
High inrush current									
96706	21	10.2	5	4	12	10	17	276	–
96705	–	32.0	–	14	5	5	5	145	–

Notes

1. Cap = top part of plastic housing.
2. Pitch 4e/1e:
   a) For low cap, replace X in catalogue number by 2
   b) For high cap, replace Y in catalogue number by 6.
3. Pitch 4e/2e:
   a) For low cap, replace X in catalogue number by 3
   b) For high cap, replace Y in catalogue number by 7.

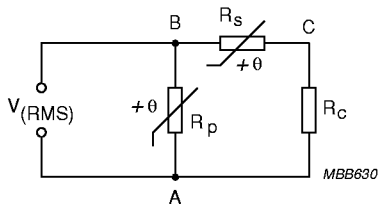
Mono Range

Table 2 Electrical data and catalogue numbers

CATALOGUE NUMBER 2322 662 ..... note 1	MINIMUM PEAK-TO-PEAK INRUSH CURRENT (A)		MAXIMUM PEAK-TO-PEAK RESIDUAL CURRENT (after 180 s) (mA)		R_{25} (Ω)	R_{coil} (Ω)		U_{max} (RMS) (V)
	220 V (AC)	110 V (AC)	220 V (AC)	110 V (AC)		MIN.	TYP.	
96281	11	5.2	20	30	30	17	25	276
96682	20	9.0	25	30	18	10	13	276
96683	25	12	30	40	14	10	10	276
96684	21	10.2	30	40	12	10	17	276
96285	–	24	–	40	7	3	5	145
96686	–	32	–	50	5	5	5	145
96687	20	10	30	35	9	17	20	276
96688	12.8	5.8	20	30	26	14	25	276

Note

1. Catalogue numbers 2322 662 96281 and 2322 662 96285 are produced with a low cap; all other catalogue numbers have a high cap.



R_s = resistance of series PTC.
R_p = resistance of parallel PTC.
R_c = replaces the degaussing coil (Z = 25 W).

Fig.5 Measuring circuit.