

## Series TV

**Sensitive ultraminiature  
«TO 5 transistor size»  
non latching relays  
28 V / 1 A pick-up power ≤ 60 mW**

APPLICATION SPECIFICATIONS  
MIL-R-39016/11 -/16 -/21  
CECC 1601-016

### **General characteristics**

N° of pole	2 Pdt
Volume	0,54 cm <sup>3</sup>
Mass	2,7 g with leads 38 mm[1.500] lenght 2,3 g with leads 4,75 mm[.187] lenght 2,7 g with spreader pad, leads 4,75 mm[.187] lenght

### **Switching characteristics**

Life at rated load	1 x 10 <sup>5</sup> operations mini
Nominal contact rating on power supply 28 V d c	1 A resistive load 0,2 A inductive load (inductance 320 mH) Lamp: 0,10 A at 28 Vdc
Operating time at 25° C	4 ms max
Release time at 25° C T	2 ms max
TV S - TV SS	7,5 ms max
Bounce time at 25° C	1,5 ms max
Overload (100 cycles )	2 Amperes

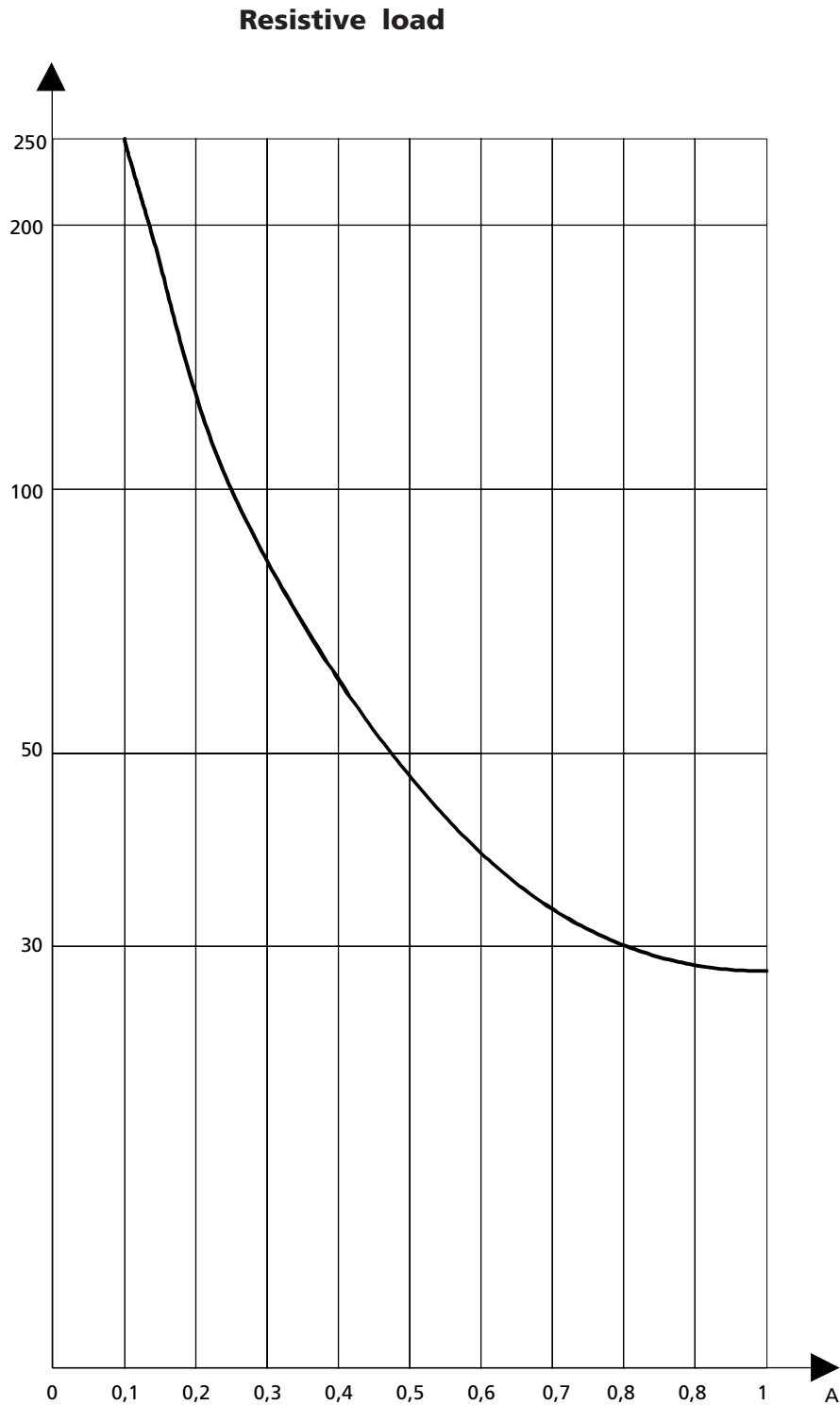
### **Environmental characteristics**

Temperature range	- 65° C to + 125° C
Vibration	30 g 3 000 Hz
Shock	75 g 6 ms
Opening contact maxi	10 μs
Leak rate	≤ 1 x 10 <sup>-8</sup> atm . cm <sup>3</sup> / s

### **Electrical characteristics**

Contact resistance ( measured at 3,2 mm from the header)	Relay with spreader pad	
- Initial	0,10 Ω max	0,12 Ω max
- After life	0,20 Ω max	0,22 Ω max
Dielectric strength (see level)		
Between contacts and case	500 V rms	
Between coil and case	500 V rms	
Between open contact	500 V rms	
Between terminals at 22 000 m altitude	125 V rms	
Insulation resistance		
(at 20°C, 50% relative humidity)	> 10 000 M Ω at 500 V dc	
Coil / case at 125 °C	> 1 000 M Ω	
Coil data	see page 4	

**Switching capacities for different life cycles as a function of voltage**



## Part numbering system

**\*\* TV \* 5 P \* \* \*\***

### VERSION

**RB** : Blue ribbon

### RELAY TYPE

### OPTION

without suffix: No suppressor network

**S** : with coil transient suppression device

**SS** : with coil transient suppression device and  
polarity reversal protection (consult us)

### COIL CODE

**5** , **6** ,... ( see page 4 )

### HEADER TERMINAL STYLE

without suffix: Gold plated leads, 38 mm[1.500] length

**P** : Leads, 4,75 mm [.187] length ( see page 5 )

**R** : Leads, 12,7 mm [.500] length

**E** : Spreader pad, leads, 4,75 mm [.187] length

**E R** : Spreader pad, leads, 9,4 mm [.370] length

**N** : Spacer pad, leads, 38 mm [1.500] length

**N R** : Spacer pad, leads, 12,7 mm [.500] length

**N P** : Spacer pad, leads, 4,75 mm [.187] length

### PLATED TERMINAL

without suffix: Gold plated leads

**B** : Tin plated leads

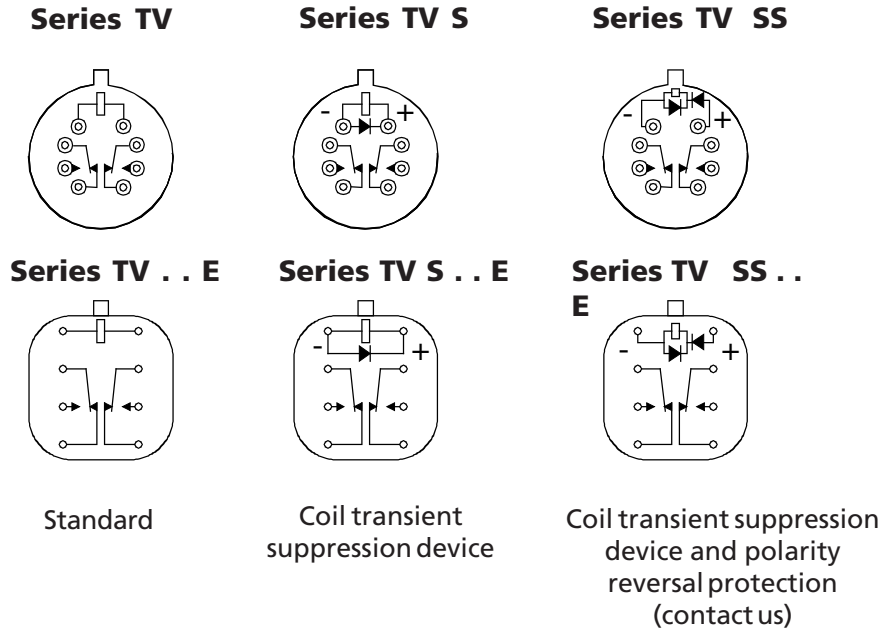
### LOW LEVEL TEST

**S** : Systematically included in «Blue Ribbon» version

### SPECIAL FEATURE

(Consult us)

## Connection diagram



**Viewed from terminals side**  
(unenergized coil)

## Coil characteristics

COIL CODE	Nominal coil voltage	Maximum voltage	Coil resistance Ohms $\pm 10\%$ at 20 °C	Maximum pull-in		Maximum drop out		Minimum drop out	
				125°C	20 °C	125°C	20 °C	- 65°C	20 °C
5	5	7,5	100	3,5	2,6	2,5	1,4	0,12	0,23
6	6	10	200	4,5	3,4	3,2	2,0	0,18	0,28
9	9	15	400	6,8	4,85	4,9	3,0	0,35	0,55
12	12	20	850	9,0	7,0	6,5	4,0	0,41	0,64
18	18	30	1 600	13,5	9,8	10,0	6,0	0,59	0,92
26	26,5	40	3 300	18,0	14,0	13,0	8,0	0,89	1,40
36	36	57	6 500	27,0	20,0	19,0	10,0	1,25	1,80
48	48	75	11 000	36,0	25,8	26,0	13,0	1,60	2,40

**Overall dimensions and header terminal styles**

