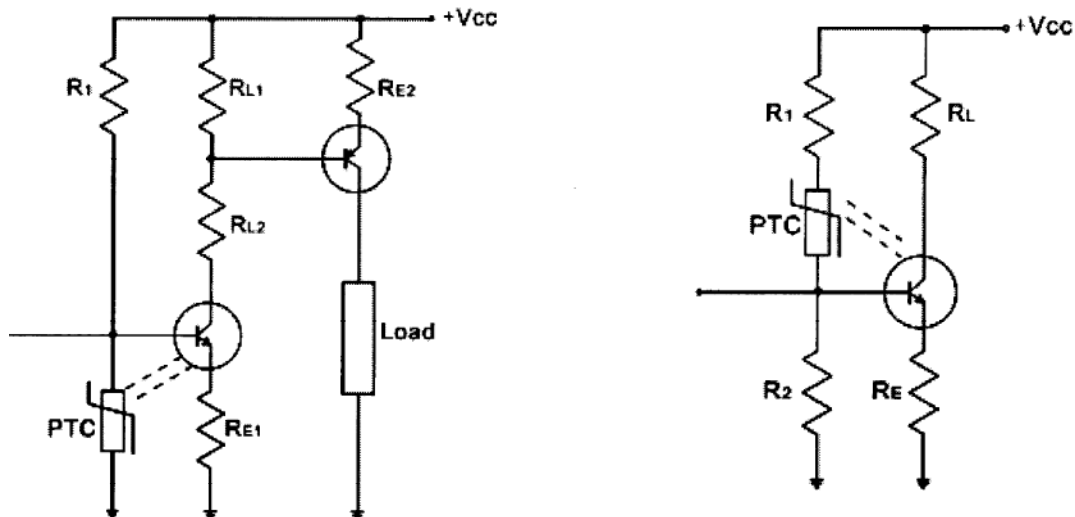


FCS Series

Applications

- Thermal Protection Of Winding in electric motors
- Limit temperature monitoring



Making use of the characteristics that the resistance of PTC thermistor increases sharply above curie temperature, when ambient temperature increases abnormally, protective circuit with PTC thermistor installed will turn on or cut off loop through resistance changing, achieving protection purpose.

Main parameters

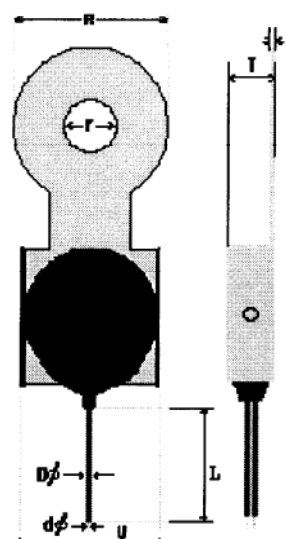
Protection temperature point $T_S (^{\circ}\text{C})$
 Rated zero power resistance $R_{25}(\Omega)$
 Resistance at protection temperature
 Resistance at protection temperature-- 15°C (R_{S-15} , Max)

Operating principle

As in fig. 1, in normal ambient temperature, PTC thermistor resistance $R_p < R_s$, lower output voltage. When ambient temperature exceeds set temperature, PTC thermistor resistance R_p increases rapidly, and exceeds R_s , leads V_o increases to high enough voltage, and cause tripping.

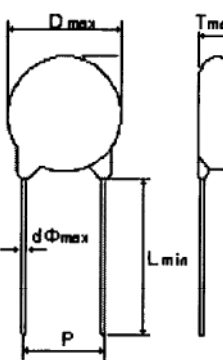
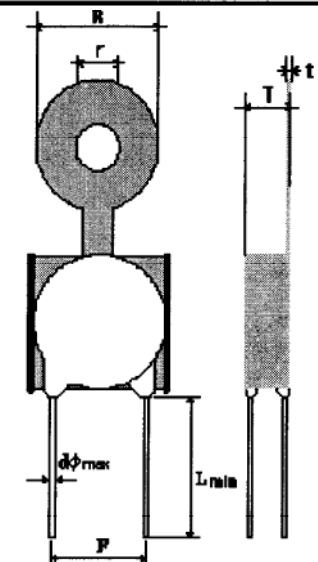
Over Temperature Protection

ST-Type

R	7.5±0.5	
r	3.2±0.1	
T	4.3±0.5	
t	0.5±0.1	
W	6.5±0.5	
L	60.0±5.0	
Dφ	1.2±0.2	
dφ	0.45±0.1	

SR-Type

SY-Type

T _{max}	3.5		R	7.5±0.5	
D _{max}	5.5		r	3.5±0.5	
H _{max}	10.0		T	4.0±0.5	
L _{max}	25.0		t	0.4±0.1	
F	5.0±1.0		L _{min}	25.0	
dφ	0.5±0.1		F	5.0±1.0	
			dφ	0.5±0.1	

Model No.	Max. Voltage (V)	Curie Temp. (±5°C)	Sensing Temp.(ST) (°C)	Resistance Value (Ω)		
				at 25°C	at ST-10°C	at ST+10°C
FCSSR(T/L)06850SD05	DC 24	60	80	Max. 100	Max. 550	Min. 550
FCSSR(T/L)07850SD05	DC 24	70	90	Max. 100	Max. 550	Min. 550
FCSSR(T/L)08500SD05	DC 24	80	100	Max. 100	Max. 570	Min. 570
FCSSR(T/L)09500SD05	DC 24	90	110	Max. 100	Max. 570	Min. 570
FCSSR(T/L)10500SD05	DC 24	100	120	Max. 100	Max. 570	Min. 1,330
FCSSR(T/L)12500SD05	DC 24	120	140	Max. 100	Max. 570	Min. 1,330