

LY600 Series Data Sheet

Features

- RoHS Compliant & Halogen Free
- Faster Tripping
- Operating temperature: -40°C ~ +85°C
- Hold Current: 0.11A~0.16A
- Maximum Voltage: 600V

Applications

- Phone set and fax machine
- LAN/WAN and VOIP cards
- Central office equipment
- IT equipment

Part Number Code

LY600 - 110

LY600: Voltage Code, LY600 series, $V_{Max}=600V$

110: $I_{Hold}=0.11A$

Dimensions (Unit: mm)

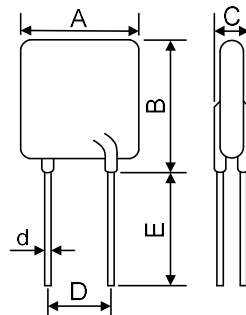


Fig. 1

Model	A(Max.)	B(Max.)	C(Max.)	D(±0.75)	E(Min.)	d(Typ.)	Shape
LY600-110	15.0	15.0	6.0	5.1	7.6	0.6	Fig. 1
LY600-150	15.0	15.0	6.0	5.1	7.6	0.6	Fig. 1
LY600-160	15.0	15.0	6.0	5.1	7.6	0.6	Fig. 1

Electrical Characteristics

Model	I_{Hold}	I_{Trip}	V_{Max}	I_{Max}	$P_{d Typ}$	Maximum time to trip		Resistent	
	(A)	(A)	(V _{AC})	(A)	(W)	Current(A)	Time(Sec)	$R_{Min}(\Omega)$	$R_{Max}(\Omega)$
LY600-110	0.11	0.22	600	3	1.0	1.0	8	6.0	16.0
LY600-150	0.15	0.30	600	3	1.0	1.0	9	5.0	14.0
LY600-160	0.16	0.32	600	3	1.0	1.0	10	4.0	12.0

- ◆ I_{Hold} =Hold Current. Maximum current device will not trip in 25°C still air.
- ◆ I_{Trip} =Trip Current. Minimum current at which the device will always trip in 25°C still air.
- ◆ V_{Max} =Maximum operating voltage device can withstand without damage at rated current (I_{Max}).
- ◆ I_{Max} =Maximum fault current device can withstand without damage at rated voltage (V_{Max}).
- ◆ $P_{d Typ}$ =Typical power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.
- ◆ R_{Min} =Minimum resistance of device in initial (un-soldered) state at 25°C.
- ◆ R_{Max} =Maximum resistance of device in initial (un-soldered) state at 25°C.

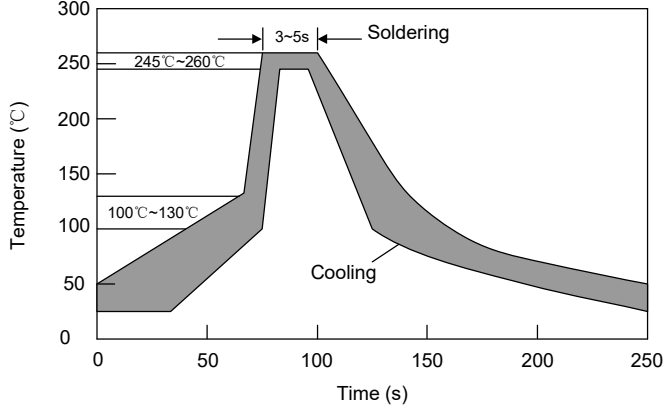
Thermal Derating Chart- I_H (A)

Model	Maximum ambient operating temperature									
	-40°C	-20°C	0°C	25°C	30°C	40°C	50°C	60°C	70°C	85°C
LY600-110	0.162	0.152	0.131	0.110	0.101	0.091	0.080	0.070	0.061	0.046
LY600-150	0.221	0.207	0.179	0.150	0.138	0.125	0.110	0.096	0.083	0.063
LY600-160	0.235	0.221	0.190	0.160	0.147	0.133	0.117	0.102	0.088	0.067

Environmental Specifications

Test	Conditions	Resistance Change
Passive aging	+85°C, 1000 hours	$\leq R_{Max}$
Humidity aging	+85°C/85%R.H., 1000 hours	$\leq R_{Max}$
Thermal shock	-55°C to +125°C, 10 times	$\geq R_{Min}$
Solvent Resistance	MIL-STD-202, Method 215F	No change
Vibration	MIL-STD-202, Method 201	No change

Soldering

Wave Soldering		
Soldering Temperature	245°C~260°C	
Soldering Time	≤5 seconds	
Soldering Position	PPTC lead and the distance from the bottom ≥ 6mm	
Manual Soldering		
Soldering Temperature	250°C~280°C	
Soldering Time	≤3 seconds	
Soldering Position	PPTC lead and the distance from the bottom ≥ 6mm	

Packaging Quantity

Model	Quantity
LY600-110~LY600-160	200pcs/bag

Storage

The maximum ambient temperature shall not exceed 40°C. Storage temperatures higher than 40°C could result in the deformation of packaging materials. The maximum relative humidity recommended for storage is 70%. High humidity with high temperature can accelerate the oxidation of the solder plating on the leads and reduce the solderability of the components. Sealed plastic bags with desiccant shall be used to reduce the oxidation of the leads and shall only be opened prior to use. The products shall not be stored in areas where harmful gases containing acid or alkali or other harmful substances are present.

Warning

- ✦ Use PPTC beyond the maximum ratings or improper use may result in device damage, electrical arcing and flame.
- ✦ PPTC are intended for protection against occasional over current or over temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
- ✦ Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.
- ✦ Use PPTC with a large inductance in circuit will generate a circuit voltage above the rated voltage of the PPTC.
- ✦ Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.
- ✦ Contamination of the PPTC material with certain silicon based oils or some aggressive solvents can adversely impact the performance of the devices.PPTC can be cleaned by standard methods.