

For types:

High Voltage Focus Potentiometers

PHF139
PHF139B



Application:

The product is designed for Flyback Transformers of Color TV or Monitor.

Mechanical Characteristics and Requirements:

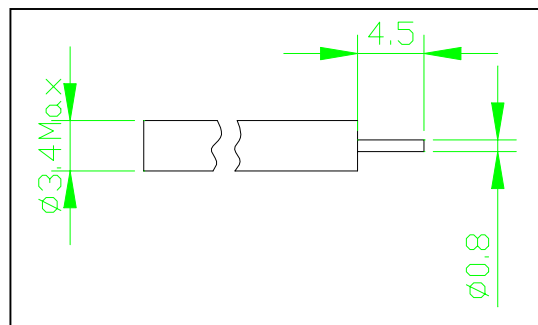
1. Outline Dimensions:

See attached Fig 1.

2. Mechanical Parameters:

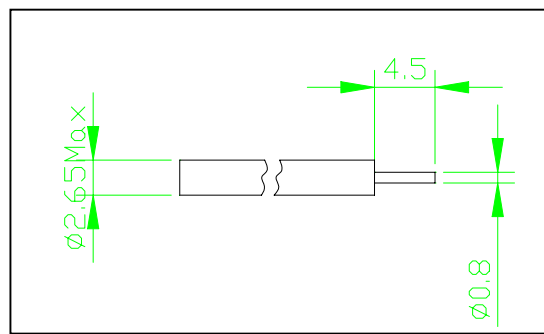
Parameters		MIN	MAX	UNIT
Rotation Angles	Focus(b1)	175	185	deg.
	Screen(b2)	145	155	deg.
Starting torque			30	mNm
Operating torque		3	30	mNm
Stop torque			300	mNm
Mechanical life		50		cycles
Insertion force	focus wire(b1)		25	N
	screen wire(b2)		25	N
Extraction force	focus wire(b1)	50		N
	screen wire(b2)	50		N
Axial Thrust on the shafts			150	N
Weight		13	(normal)	gram

3. Dimensions of recommended connecting wire.



Dimensions in mm.

Focus wire



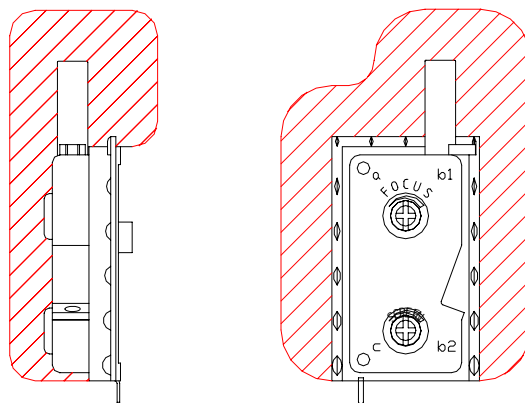
Screen wire

4. Connections

See attached Fig 2.

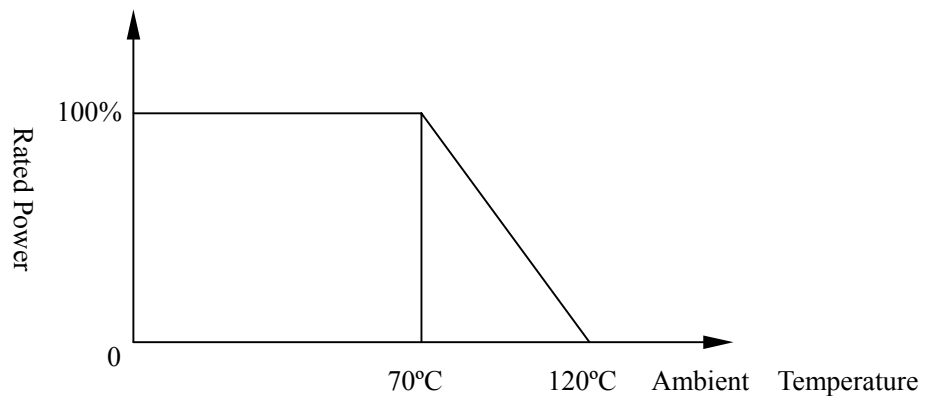
Safety Requirements

When the unit works, high voltage will be loaded, and an area of 10mm around the Focus pack should be free from the metal and other conductive parts. See fig below.



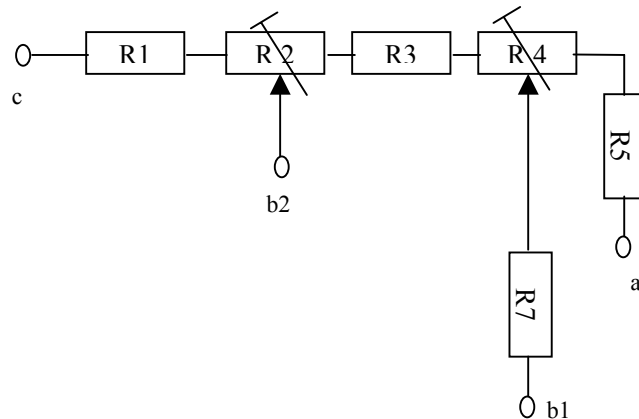
Electrical Characteristics and Requirements

1. Derating Curve

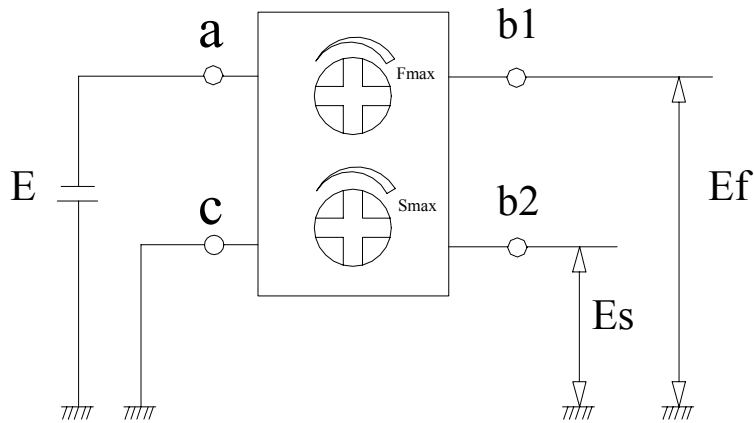


2.Focus voltage ratio and Screen voltage ratio

2.1 Circuit diagram



2.2 Focus voltage ratio and Screen voltage ratio will be measured as shown below

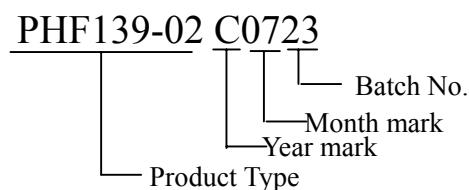


2.3 Electrical data

TYPE	Resistance (MΩ)	Voltage (kV)	Rated Power(W)	Voltage Ratio (%)		Voltage Ratio (%)	
				Fmax	Fmin	Smax	Smin
PHF139(B) *-02	105 ± 15%	9.65	1.04	≥99.5	42-50	16-21	1-2.15
PHF139(B)-04	105 ± 15%	9.3	0.97	≥99.5	40-48	16-21	1-2.15
PHF139(B)-05	125 ± 15%	11	1.14	98.6-99.4	55-65	13.5-19	1-2.5
PHF139(B)-33	133 ± 15%	9.3	0.77	98.6-99.4	46-51	16-21	1-2.15

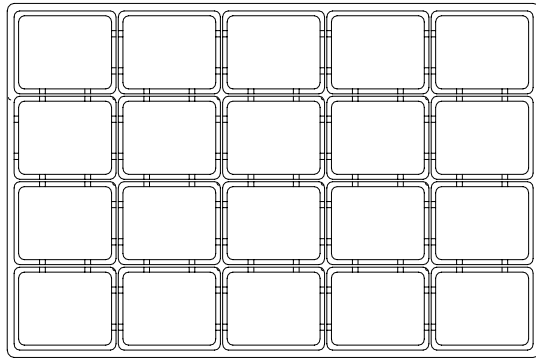
*We offer different types of bottom. When ordering, please indicate B type or Non-B type.

Marking

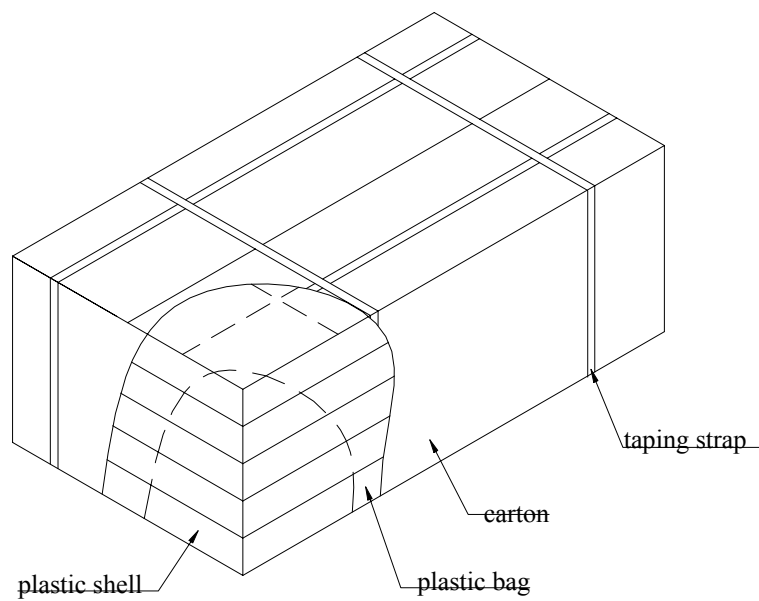


Packaging

1. The unit will be packed in plastic shells of 100 pcs each, 5 shells are put in one plastic bag in one carton. The carton will be bound tightly with taping straps. See drawing below:



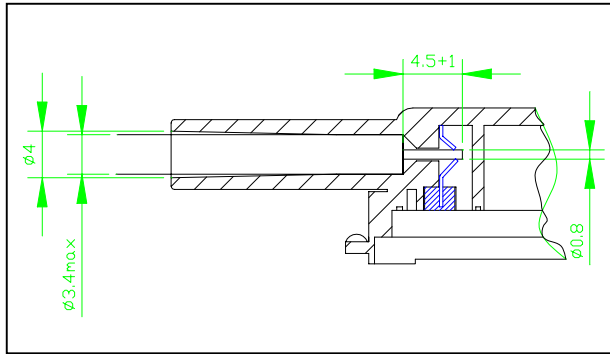
Plastic shell



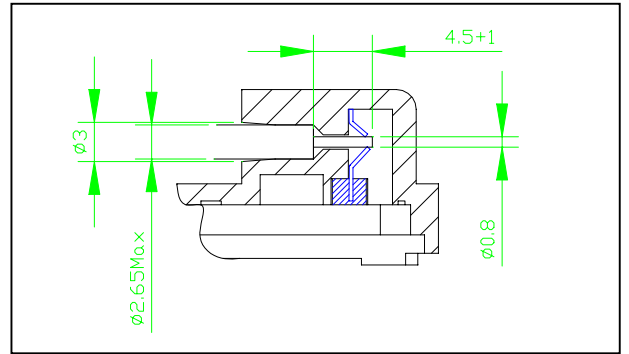
2. Package dimensions and weight:

Carton Dimensions (mm)			Weight (Kg)	
L	W	H	Net	Gross
500	300	210	6.5	8

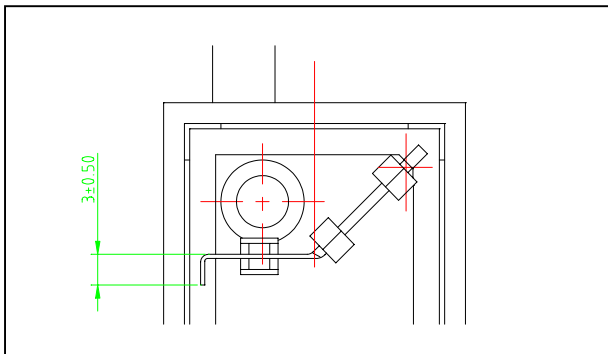
Fig 2: Connection



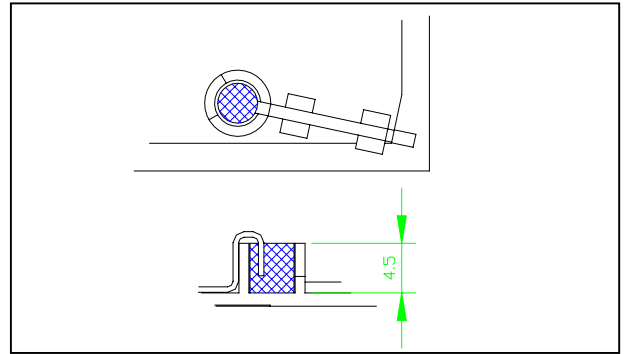
Focus out



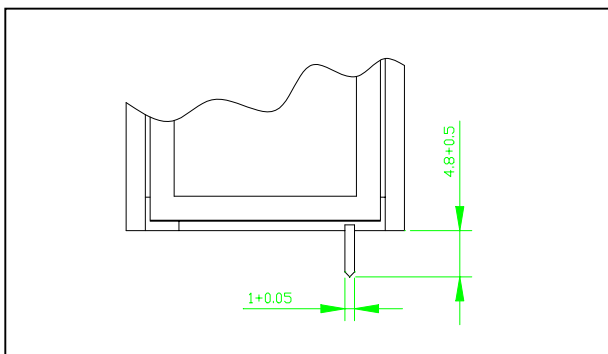
Screen out



Focus input (PHF139B)



Focus input (PHF139)



Earth

*All dimensions are in mm and NTS.

LIST OF MATERIALS

NAME OF PART	MATERIAL	TYPE	MANUFACTURER	FLAME CLASS	UL FILE NUMBER
Case	Polycarbonate	Lexan 500 R	General Electric	UL-94-VO	E45329 E121562
Bottom	Polycarbonate	Lexan 500 R	General Electric	UL-94-VO	E45329 E121562
Shafts	Modified PPO	PX9406-701	General Electric	UL-94-VO	E45587
Rubber spring	Silicone rubber		Xi'an JingGong (China)		
Vacuum grease	Silicone grease	7102	Chongqing YiPing (China)		
Glue	Silicone rubber	TSE392W	General Electric	LOI 31%	