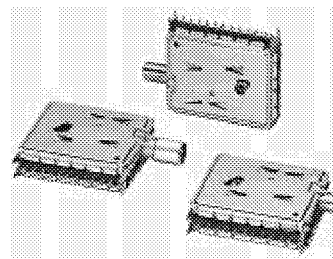


Type : **ET50**

Part No.: **ENV□□D□□□□**

Aiming to accelerate production of audio visual equipment to meet demands of the global market, the ET50 Type compact electronics tuner generally utilizes the structural specifications, including unit configuration and terminal arrangement, standardized in the electronics industry. We have not only reduced the size of the tuner but also achieved higher performance by introducing state-of-the-art circuitry using our latest techniques and a unique custom made IC. A system where tuners are supplied from our production bases throughout the world has been established to meet customer's needs.



### Features

- Conformable to the standard mounting specifications of the industry
- Conformable to the Jamming Control Law of each country
- Achieved high quality by our original process with reflow soldering

### Recommended Applications

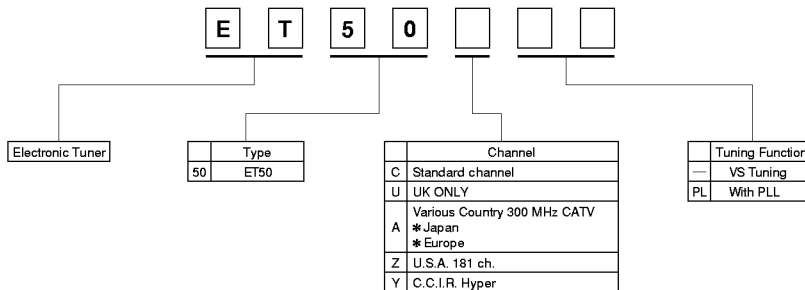
- TV, VTR

### ■ Product Range

All channels in the world

Destination	Type	Frequency	Electrical Specifications		Input Terminal	Tuning System	
			Band	+B Voltage		VS	FS
Japan	ET50APL ET50A	Band 1 : 90 to 170 MHz Band 2 : 170 to 318 MHz Band 3 : 480 to 770 MHz	3	9 V	Pin-Jack or F Connector	○	○
U.S.A. 181 ch.	ET50ZPL	Band 1 : 54 to 174 MHz Band 2 : 132 to 366 MHz Band 3 : 366 to 806 MHz	3	9 V	Pin-Jack or F Connector	—	○
Hyper	ET50YPL ET50Y	Band 1 : 47 to 174 MHz Band 2 : 174 to 470 MHz Band 3 : 470 to 862 MHz	3	9 V	Pin-Jack or IEC Connector	○	○
U.K.	ET50UPL ET50U	Band 3 : 470 to 862 MHz	1	9 V	IEC Connector	○	○

### ■ Explanation of Type Numbers

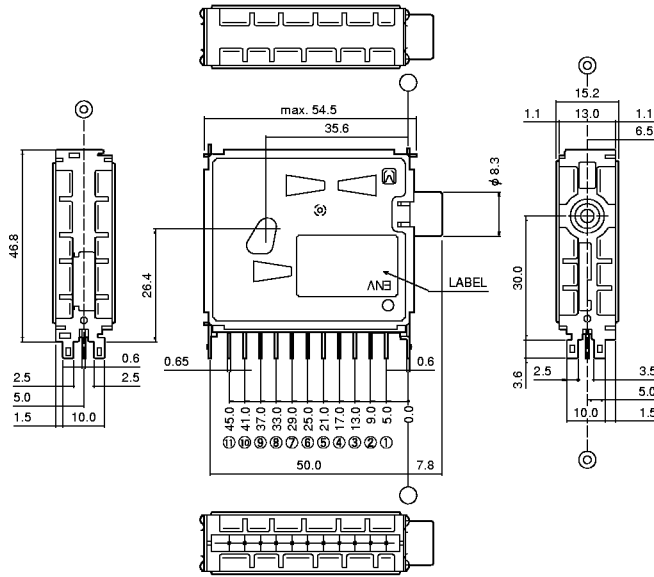


### ■ Performance Specifications, Summary

	ET50APL Japan 300 MHz CATV	ET50ZPL U.S.A. 181 ch.	ET50YPL Hyper	ET50U U.K.
1. Channel	ch. 1 to 12 ch. 13 to 62 ch. C13 to C38	ch. 12 to 13 ch. A5 to FFF ch. 14 to 69	ch. E2 to E12 ch. S1 to S41 ch. E21 to E69	ch. E21 to E69
2. VIF / SIF	58.75 / 54.25 MHz	45.75 / 41.25 MHz	38.9 / 31.4 MHz	39.5 / 33.5 MHz
3. Input Impedance	75 Ω Unbalanced	75 Ω Unbalanced	75 Ω Unbalanced	75 Ω Unbalanced
4. Output Impedance	75 Ω Unbalanced	75 Ω Unbalanced	75 Ω Unbalanced	75 Ω Unbalanced
5. Noise Figure	1 to 12: 6 dB max. 13 to 62: 8 dB max. C13 to C38: 9 dB max.	2 to 13: 9 dB max. A5 to FFF: 9 dB max. 14 to 69: 10 dB max.	E2 to E12: 9.5 dB max. S1 to S41: 9.5 dB max. E21 to E69: 11 dB max.	E21 to E69: 9.5 dB max.
6. Gain	1 to 12: 42 dB typ. 13 to 62: 42 dB typ. C13 to C38: 40 dB typ.	2 to 13: 42 dB typ. A5 to FFF: 40 dB typ. 14 to 69: 45 dB typ.	E2 to E12: 40 dB typ. S1 to S41: 40 dB typ. E21 to E69: 41 dB typ.	E21 to E69: 42 dB typ.
7. Image Rejection	1 to 12: 70 dB min. 13 to 62: 55 dB min. C13 to C38: 60 dB min.	12 to 13: 55 dB min. A5 to FFF: 50 dB min. 14 to 69: 45 dB min.	E2 to E12: 55 dB min. S1 to S41: 55 dB min. E21 to E69: 45 dB min.	E21 to E69: 50 dB min.
8. Supply Voltage	+ 9 V	+ 9 V	+ 9 V	+ 9 V
9. PLL System	3 wire / I <sup>2</sup> C	3 wire / I <sup>2</sup> C	3 wire / I <sup>2</sup> C	3 wire / I <sup>2</sup> C

### ■ Dimensions in mm (not to scale)

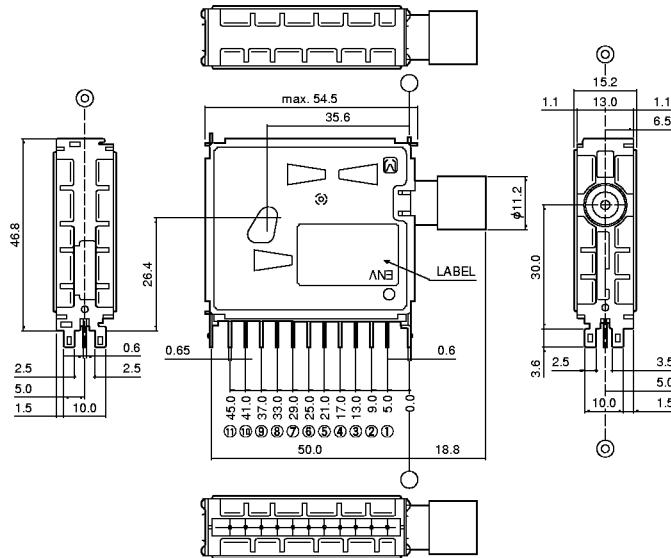
#### ● ET50 ( Pin-Jack )



#### ■ TERMINAL SUPPLY VOLTAGE IN CASE OF FS TUNING

No.	Terminal Name	Supply Voltage
1	AGC	7.0 G. max
2	TU	—
3	ENABLE	—
4	CLOCK	—
5	DATA	—
6	V supply	9.0 V
7	BPL	5.0 V
8	NC	—
9	BTL	30.0 V
10	NC	—
11	IF1	—

#### ● ET50 ( IEC Connector )

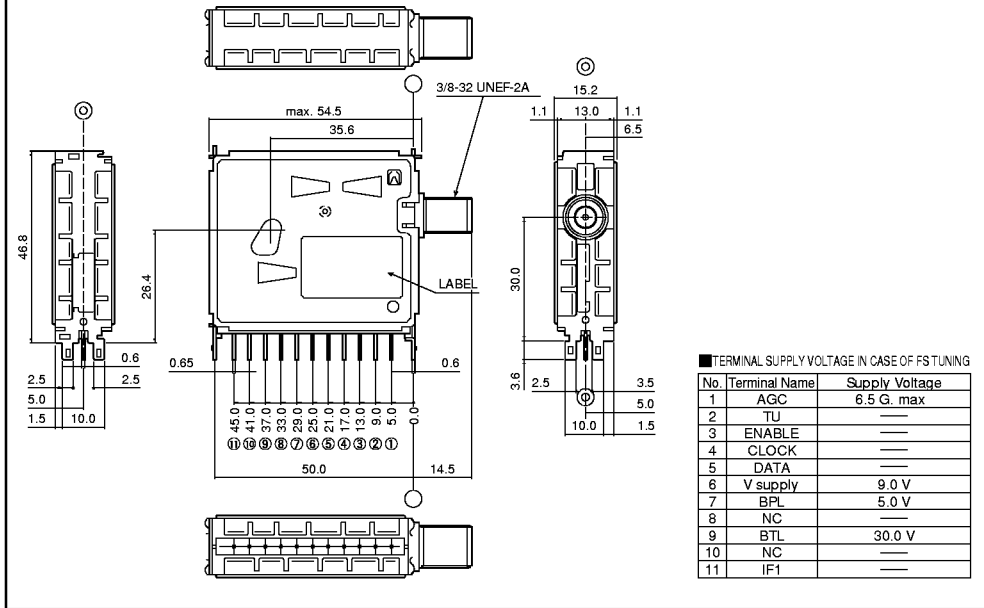


#### ■ TERMINAL SUPPLY VOLTAGE IN CASE OF VS TUNING

No.	Terminal Name	Supply Voltage		
		VHF	UHF	—
1	AGC	Low	High	—
2	TU	7.5 G. max		
3	B3 High	—	—	—
4	B2 Mid	—	—	—
5	B1 LOW	—	—	—
6	V supply	12.0 V		
7	AFT	—		
8	NC	—		
9	NC	—		
10	NC	—		
11	IF1	—		

### ■ Dimensions in mm (not to scale)

#### ● ET50 ( F Connector )



### ■ Block Diagram ( ET50 )

