

The E12788 is a D-type socket assembly designed for 28 mm diameter side-on photomultiplier tubes. It uses transistor circuit for the voltage divider circuit, making it ideal for use in high output applications.

## FEATURES

- Active voltage divider circuit
- Low power consumption, low heat generation without incident light, power consumption is 1/10 of resistive divider type.
- Excellent output linearity
- High output current even at low supply voltage



## SPECIFICATIONS

Parameter	Description / Value	Unit
Max. insulation voltage between case and pins	1500	V
Max. supply voltage between gnd and hv cable	1500	V
Voltage divider current (at Max. supply voltage)	at output signal current of 100 $\mu$ A	130 $\mu$ A
	when no incident light	30 $\mu$ A
Insulation resistance between case and pins	Min. $1 \times 10^{11}$	$\Omega$
Leakage current in signal (at -1000 V)	Max. $1 \times 10^{-10}$	A
Linear output in DC mode (at -1000 V) <sup>Ⓐ</sup>	Min. 100	$\mu$ A
Signal output <sup>Ⓑ</sup>	DC / Pulse	—
Operating ambient temperature <sup>Ⓒ</sup>	0 to +50	$^{\circ}$ C
Storage temperature <sup>Ⓒ</sup>	-15 to +60	$^{\circ}$ C
Weight	41.8	g

**NOTE:** <sup>Ⓐ</sup>The current at which output of photomultiplier tube deviates by  $\pm 2\%$  from the linear (Refer to Figure 1)  
<sup>Ⓑ</sup>This divider circuit supports a higher current than previous models, but do not exceed the maximum current specified for an individual PMT.  
<sup>Ⓒ</sup>No condensation

Figure 1: DC linearity

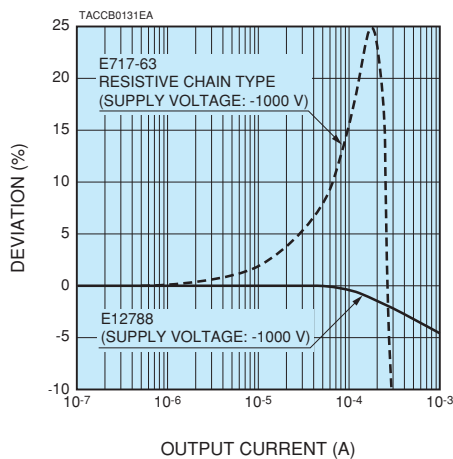


Figure 2: Maximum output under 2% DC linearity

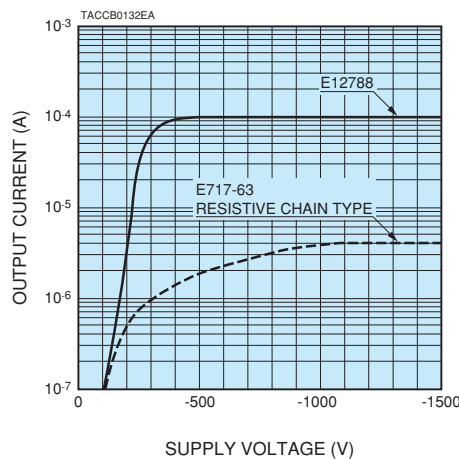
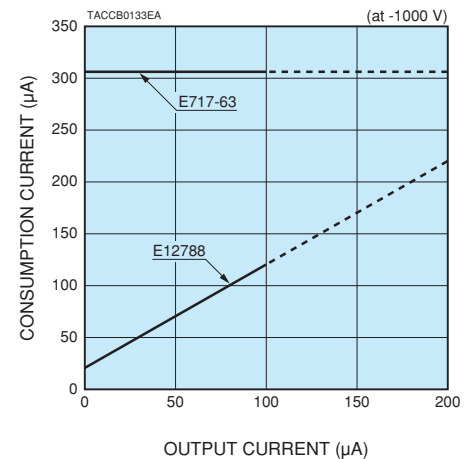
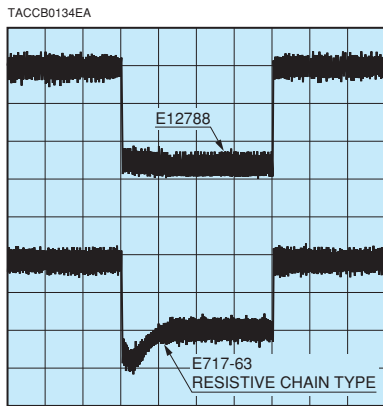


Figure 3: Output current vs. consumption current



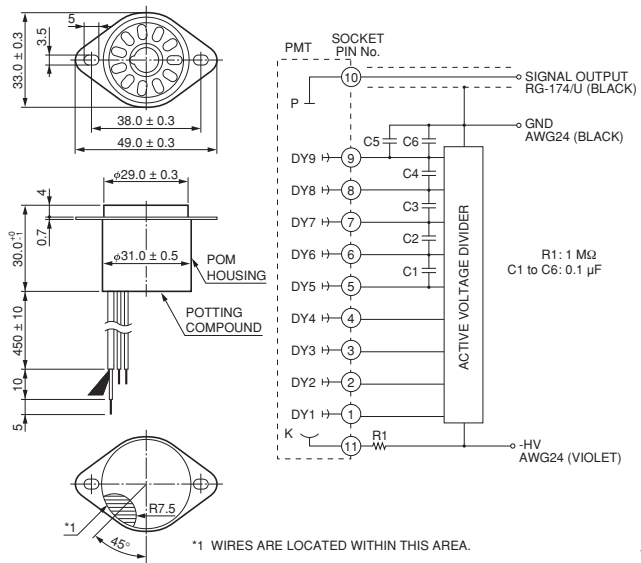
# ACTIVE D TYPE SOCKET ASSEMBLY E12788

Figure 4: Output pulse waveform



SUPPLY VOLTAGE: -300 V  
 OUTPUT: 5 mVp-p (100  $\mu$ A)  
 PULSE WIDTH: 20 ms

Figure 5: Dimensional outline and circuit diagram (Unit: mm)



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