

D-type socket assemblies

Socket assembly Type No.	Applicable PMT diameter	Out-line and diagram	Grounded electrode / Supply voltage polarity	Maximum ratings			Leakage current in signal Max. (A)	Total voltage divider resistance (MΩ)	Maximum linear output in DC mode (μA)	Signal output	Note	
				Insulation voltage between case and pins (V)	Supply voltage (V)	Voltage divider current (mA)						
For side-on types												
E850-13	13 mm (1/2")	①	Anode / -	1500	1250	0.38	1×10^{-10}	3.30	18 (at 1250 V)	DC / Pulse	Mounting flange E5038 (P.90) supplied. E850-13 with connector E5038 not supplied	
E850-22		②	Anode / -	1500	1250	0.38	1×10^{-10}	3.30	18 (at 1250 V)	DC / Pulse		
E717-63	28 mm (1-1/8")	③	Anode / -	1500	1500	0.46	1×10^{-10}	3.30	22 (at 1500 V)	DC / Pulse		
E717-74		④	Anode-Cathode / +-	1500	1500	0.46	1×10^{-10}	3.30	22 (at 1500 V)	DC / Pulse	Pin output	
E717-500A		⑤	Anode / -	1500	1500	0.46	1×10^{-10}	3.30	22 (at 1500 V)	DC / Pulse	E717-63 with connector	
For head-on types												
E1761-04	10 mm (3/8")	⑥	Anode / -	1500	1500	0.41	1×10^{-10}	3.63	20 (at 1500 V)	DC / Pulse		
E1761-05		⑦	Anode / -	1500	1500	0.37	1×10^{-10}	4.02	19 (at 1500 V)	DC / Pulse	For R2496	
E849-35	13 mm (1/2")	⑧	Anode / -	1250	1250	0.34	1×10^{-10}	3.63	17 (at 1250 V)	DC / Pulse	E5038 (P.90) supplied	
E849-90		⑨	Anode / -	1250	1250	0.34	1×10^{-10}	3.63	17 (at 1250 V)	DC / Pulse	E849-35 with connector E5038 not supplied	
E849-99		⑩	Anode / -	1250	1250	0.32	1×10^{-10}	3.96	16 (at 1250 V)	DC / Pulse	For R12421, E5038 (P.90) supplied	
E974-13	19 mm (3/4")	⑪	Anode / -	1800	1800	0.48	1×10^{-10}	3.81	23 (at 1800 V)	DC / Pulse		
E974-14		⑫	Cathode / +	1800	1800	0.48	—	3.81	—	Pulse	For scintillation counting	
E974-17		⑬	Anode / -	1800	1800	0.48	1×10^{-10}	3.81	23 (at 1800 V)	DC / Pulse	E974-13 with connector	
E974-22		⑭	Anode / -	1800	1800	0.44	1×10^{-10}	4.16	21 (at 1800 V)	DC / Pulse	For R1450, with connector	
E2253-05		⑮	Anode / -	1800	1800	0.36	1×10^{-10}	5.13	17 (at 1800 V)	DC / Pulse	For R3478, with connector	
E2253-08		⑯	Cathode / +	1800	1800	0.36	—	5.13	—	Pulse	For R3478, for scintillation counting	
E974-29		⑰	Anode / -	1250	1250	0.30	1×10^{-10}	4.30	14 (at 1250 V)	DC / Pulse	For R5610A, R5611A, with connector	
E974-18		⑱	Anode / -	1500	1500	0.38	1×10^{-10}	3.98	18 (at 1500 V)	DC / Pulse	For R1878, with connector	
E2924-11		25 mm (1")	⑲	Anode / -	1800	1800	0.41	1×10^{-10}	4.47	20 (at 1800 V)	DC / Pulse	For R7899
E2924			⑳	Anode / -	1500	1250	0.30	1×10^{-10}	4.29	14 (at 1250 V)	DC / Pulse	
E2924-500	㉑		Anode / -	1500	1250	0.30	1×10^{-10}	4.29	14 (at 1250 V)	DC / Pulse	E2924 with connector	
E2924-05	㉒		Cathode / +	1500	1250	0.30	—	4.30	—	Pulse	For scintillation counting	
E990-07	28 mm (1-1/8")	㉓	Anode / -	1500	1500	0.38	1×10^{-10}	3.96	18 (at 1500 V)	DC / Pulse		
E990-08		㉔	Cathode / +	1500	1500	0.38	—	3.96	—	Pulse	For scintillation counting	
E990-501		㉕	Anode / -	1500	1500	0.38	1×10^{-10}	3.96	18 (at 1500 V)	DC / Pulse	E990-07 with connector	
E2624		㉖	Anode / -	2500	2500	0.53	1×10^{-10}	4.80	26 (at 2500 V)	DC / Pulse	For R6427,	
E2624-05		㉗	Cathode / +	2500	2500	0.53	—	4.80	—	Pulse	For R6427, for scintillation counting	
E2624-14		㉘	Anode / -	2500	2500	0.53	1×10^{-10}	4.80	26 (at 2500 V)	DC / Pulse	E2624 with connector	

NOTE: (A) Measured with the maximum supply voltage

(B) Measured with a supply voltage of 1000 V except for E5996, E7083 and E6736 (900 V)

(C) The current at which the output linearity is kept within $\pm 5\%$

Socket assembly Type No.	Applicable PMT diameter	Out-line and diagram	Grounded electrode / Supply voltage polarity	Maximum ratings			Leakage current in signal Max. (A)	Total voltage divider resistance (MΩ)	Maximum linear output in DC mode (μA)	Signal output	Note
				Insulation voltage between case and pins (V)	Supply voltage (V)	Voltage divider current (mA)					
For head-on types											
E990-500	28 mm (1-1/8")	29	Anode / -	1500	1500	0.35	1×10^{-10}	4.29	17 (at 1500 V)	DC / Pulse	With connector
E990-29		30	Anode / -	1500	1500	0.34	1×10^{-10}	4.48	16 (at 1500 V)	DC / Pulse	For R3998-02
E2183-500	38 mm (1-1/2")	31	Anode / -	2000	1750	0.45	1×10^{-10}	3.97	22 (at 1750 V)	DC / Pulse	With connector
E2183-502		32	Cathode / +	2000	1750	0.45	—	3.96	—	Pulse	With connector, for scintillation counting
E1198-26	51 mm (2") 76 mm (3")	33	Anode / -	1500	1500	0.38	1×10^{-10}	4.01	18 (at 1500 V)	DC / Pulse	
E1198-27		34	Cathode / +	1500	1500	0.38	—	4.01	—	Pulse	For scintillation counting
E1198-05		35	Anode / -	1500	1500	0.46	1×10^{-10}	3.30	22 (at 1500 V)	DC / Pulse	
E1198-20		36	Cathode / +	1500	1500	0.46	—	3.30	—	Pulse	For scintillation counting
E1198-07	51 mm (2")	37	Anode / -	1750	1750	0.44	1×10^{-10}	3.98	22 (at 1750 V)	DC / Pulse	For R2154-02
E2979-500		38	Anode / -	3000	3000	0.70	1×10^{-10}	4.31	34 (at 3000 V)	DC / Pulse	For R1828-01, with rear panel connector, with magnetic shield
E1198-23	51 mm (2") 76 mm (3") 127 mm (5")	39	Cathode / +	2200	2000	0.51	—	3.97	—	Pulse	For scintillation counting
E1198-22		40	Anode / -	2200	2000	0.51	1×10^{-10}	3.97	25 (at 2000 V)	DC / Pulse	
E6316		41	Cathode / +	2200	2000	0.51	—	3.97	—	Pulse	E1198-23, with rear panel connector, for scintillation counting
E6316-01		42	Anode / -	2200	2000	0.51	1×10^{-10}	3.97	25 (at 2000 V)	DC / Pulse	E1198-22, with rear panel connector
E5859-05	51 mm (2") 76 mm (3")	43	Anode / -	1500	1500	0.38	1×10^{-10}	3.98	18 (at 1500 V)	DC / Pulse	With rear panel connector
E5859-19		44	Anode / -	2000	2000	0.57	1×10^{-10}	3.53	28 (at 2000 V)	DC / Pulse	For R7724 with rear panel connector
E5859		45	Anode / -	2700	2700	0.67	1×10^{-10}	4.06	33 (at 2700 V)	DC / Pulse	With rear panel connector
E5859-01		46	Anode / -	2700	2700	0.75	1×10^{-10}	3.62	37 (at 2700 V)	DC / Pulse	With rear panel connector
E5859-03		47	Cathode / +	2700	2700	0.75	—	3.62	—	Pulse	With rear panel connector, for scintillation counting
E1435-02	51 mm (2")	48	Anode / -	1500	1500	0.38	1×10^{-10}	3.96	18 (at 1500 V)	DC / Pulse	
E7693	127 mm (5")	49	Anode / -	3000	3000	1.03	1×10^{-10}	2.94	51 (at 3000 V)	DC / Pulse	For R1250, with rear panel connector
E10679-02	Metal package PMT R9880U series	50	Anode / -	1100	1100	0.32	1×10^{-10}	3.46	16 (at 1100 V)	DC / Pulse	
E10679-51	Metal package PMT R9880U series	51	Anode-Cathode / +-	1100	1100	0.32	1×10^{-10}	3.46	16 (at 1100 V)	DC / Pulse	Pin output
E5996	Metal package PMT R7600U series	52	Anode / -	900	900	0.33	1×10^{-10}	2.75	16 (at 900 V)	DC / Pulse	
E7083	Metal package PMT R7600U-M4 series	53	Anode / -	900	900	0.33	1×10^{-10}	2.75	4 [Ⓓ] (at 900 V)	DC / Pulse	
E6736	Metal package PMT R5900U-L16	54	Anode / -	900	900	0.38	1×10^{-10}	2.42	1.16 [Ⓓ] (at 900 V)	DC / Pulse	
E7514	Metal package PMT R8900U-C12	55	Anode / -	1000	1000	0.34	1×10^{-10}	2.97	1.4 [Ⓓ] (at 1000 V)	DC / Pulse	
E11807	Metal package PMT R11265U series	56	Anode / -	1000	1000	0.36	1×10^{-10}	2.78	17 (at 1000 V)	DC / Pulse	
E11807-01	Metal package PMT R11265U series	56	Anode / -	1000	1000	0.36	1×10^{-10}	2.69	18 (at 1000 V)	DC / Pulse	E11807, with tapered voltage divider circuit

NOTE: Ⓓ Current of one anode

CAUTION: Socket assemblies are not designed to operate in a vacuum.

Temperature ranges of D-type socket assemblies are as follows (except for some products):

Operating: 0 °C to +50 °C Storage: -15 °C to +60 °C

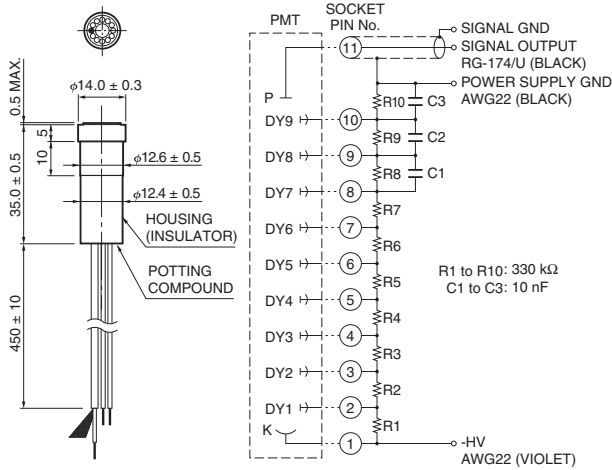
Do not use the socket assemblies if condensation occurs, since a high voltage is output from the socket.

Insert the photomultiplier tube all the way into the socket.

Insert the photomultiplier tube straight into the socket, or pull the photomultiplier tube straight out of the socket when removing it.

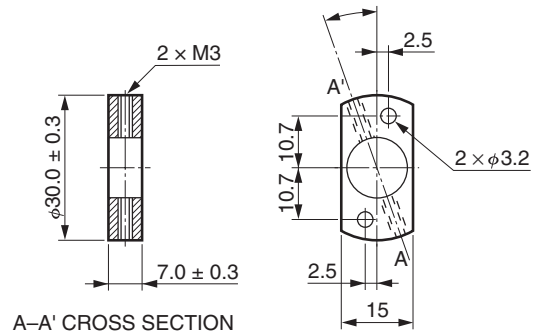
D-type socket assemblies dimensional outlines and diagrams (Unit: mm)

1 E850-13



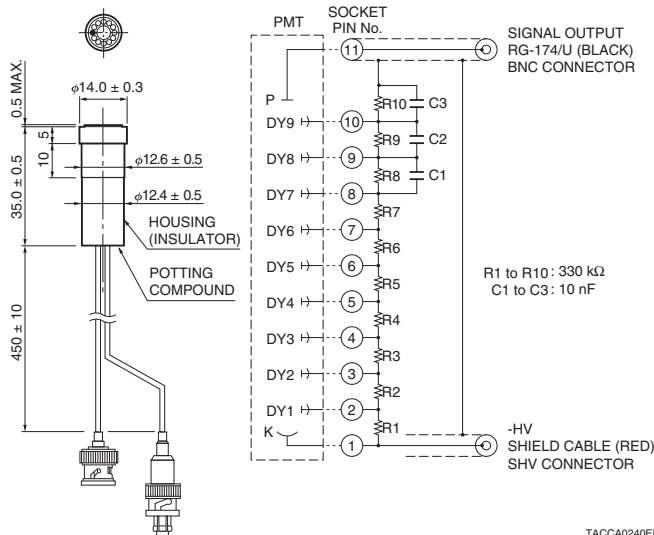
TACCA0096EC

Mounting flange: E5038 (For E850 series, E849 series)



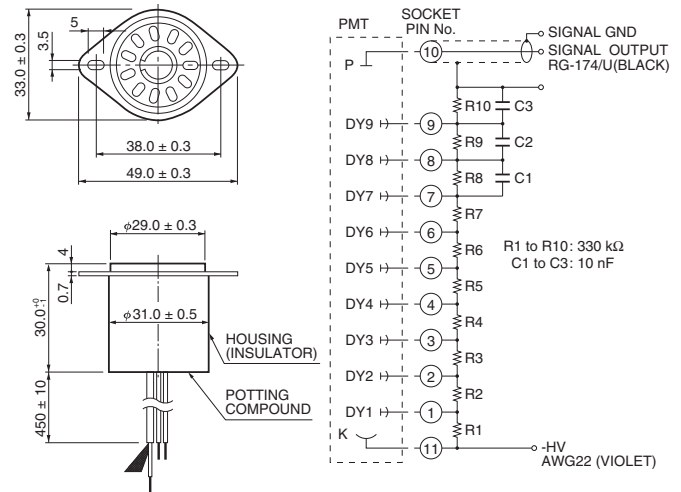
TACCA0336EA

2 E850-22



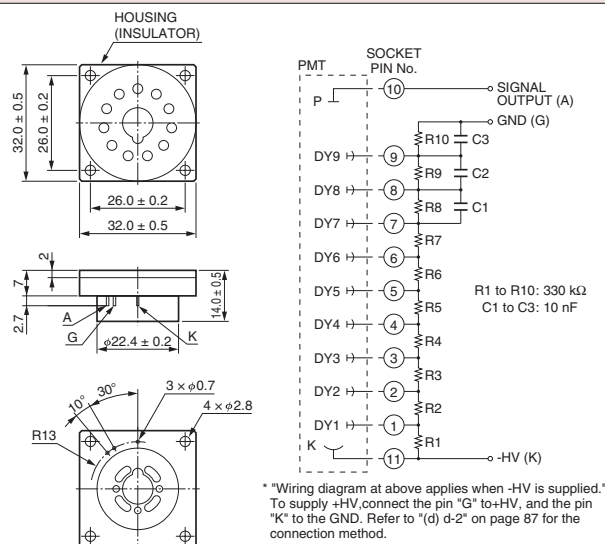
TACCA0240EB

3 E717-63



TACCA0002EH

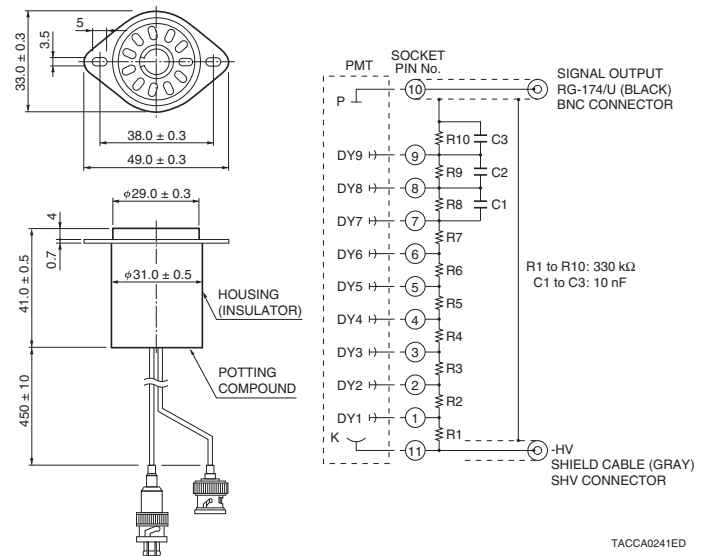
4 E717-74



* Wiring diagram at above applies when -HV is supplied.
To supply +HV, connect the pin "G" to+HV, and the pin "K" to the GND. Refer to "(d) d-2" on page 87 for the connection method.

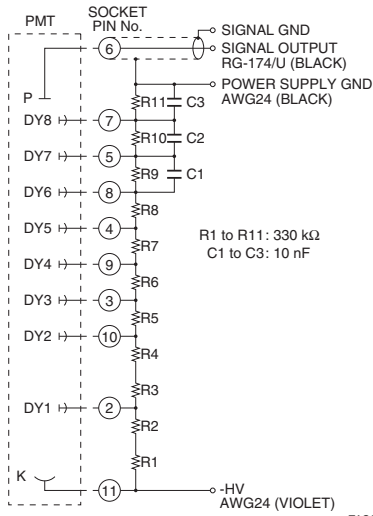
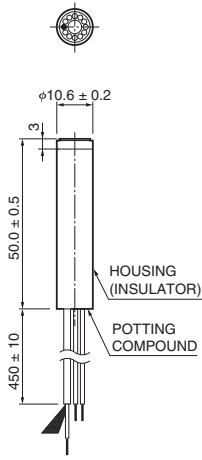
TACCA0277EA

5 E717-500A



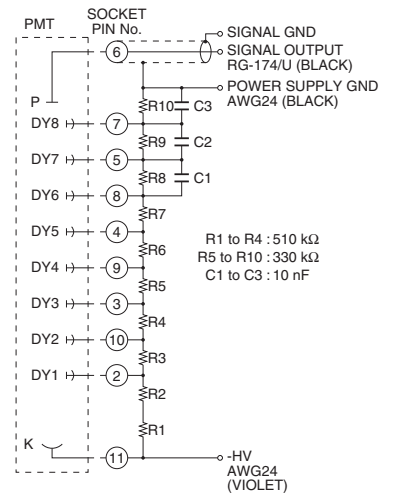
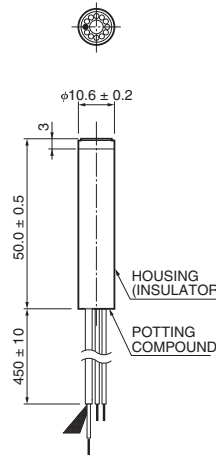
TACCA0241ED

6 E1761-04



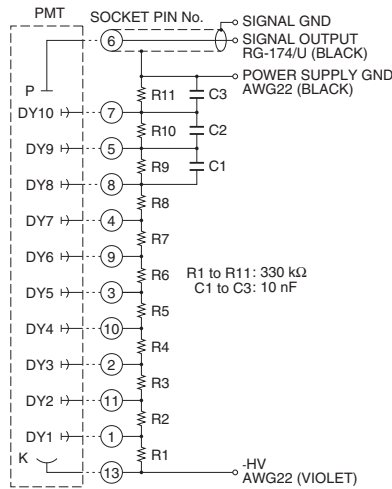
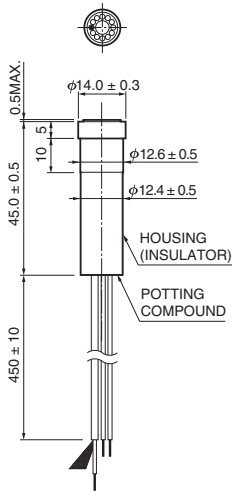
TACCA0019ED

7 E1761-05



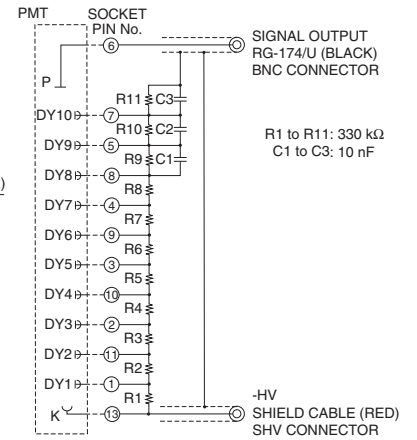
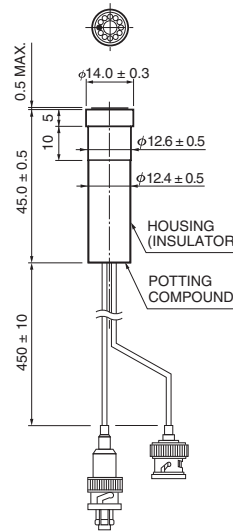
TACCA00208EB

8 E849-35



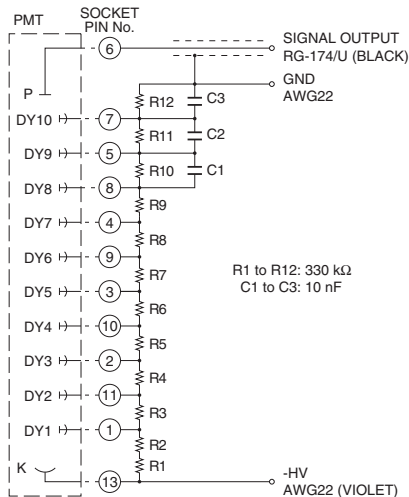
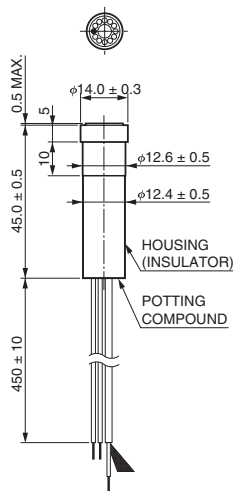
TACCA0022EB

9 E849-90



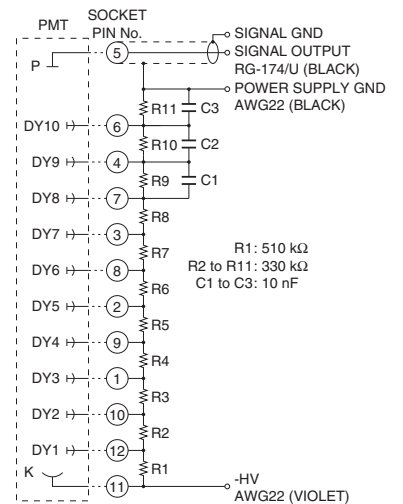
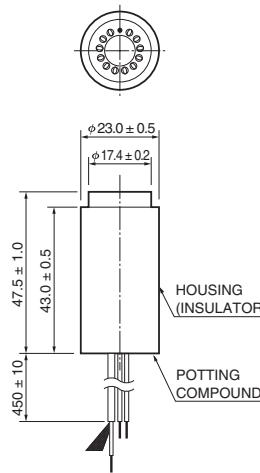
TACCA0077EC

10 E849-99



TACCA0324EA

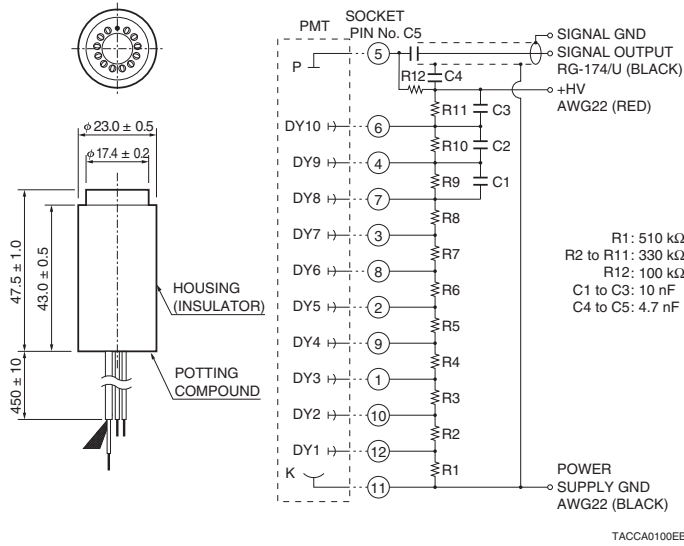
11 E974-13



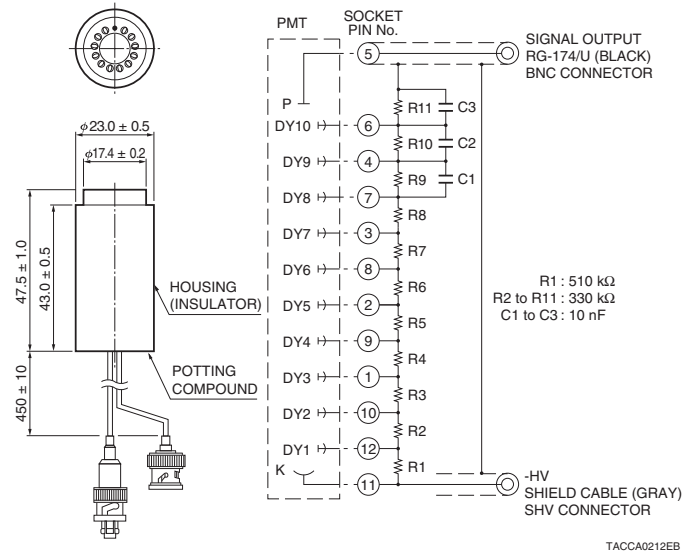
TACCA0099EB

D-type socket assemblies dimensional outlines and diagrams (Unit: mm)

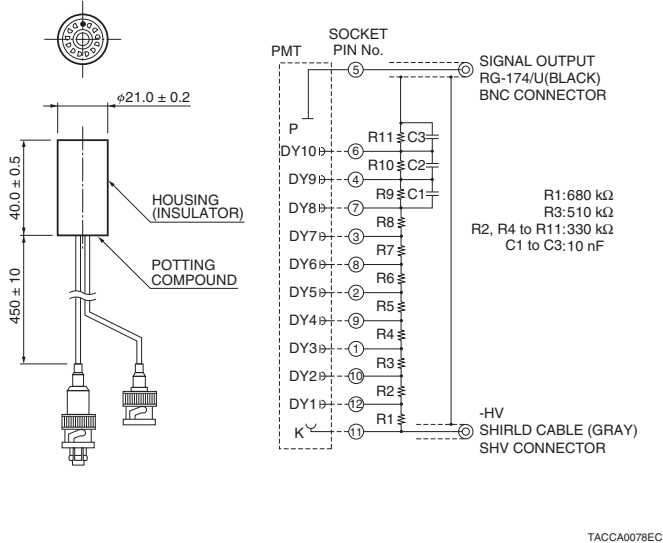
12 E974-14



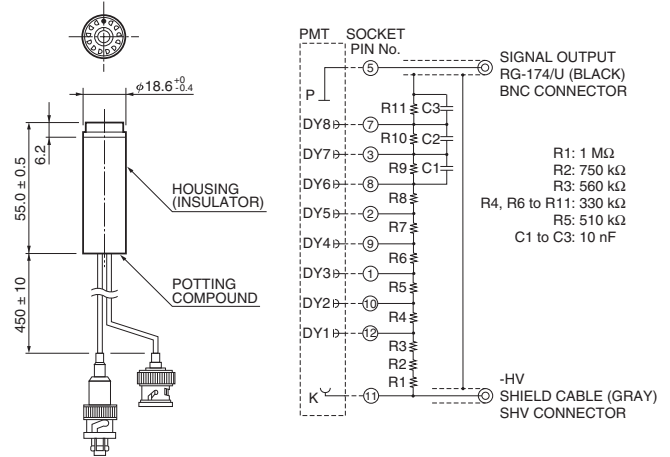
13 E974-17



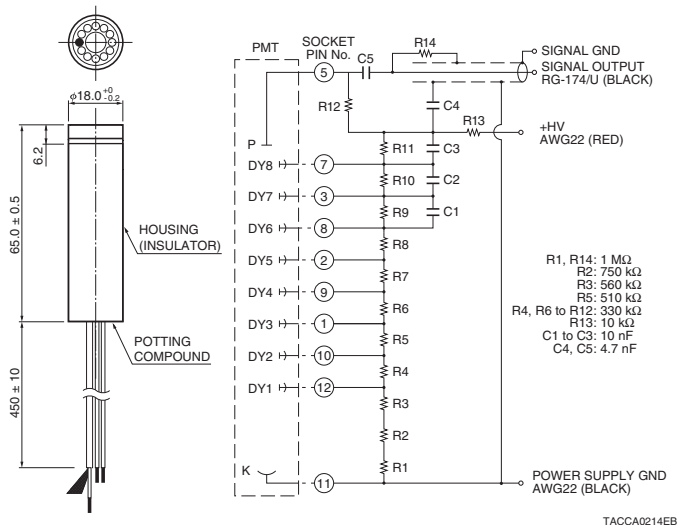
14 E974-22



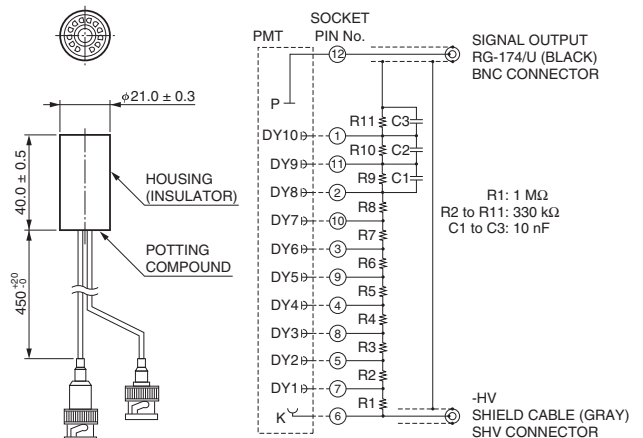
15 E2253-05



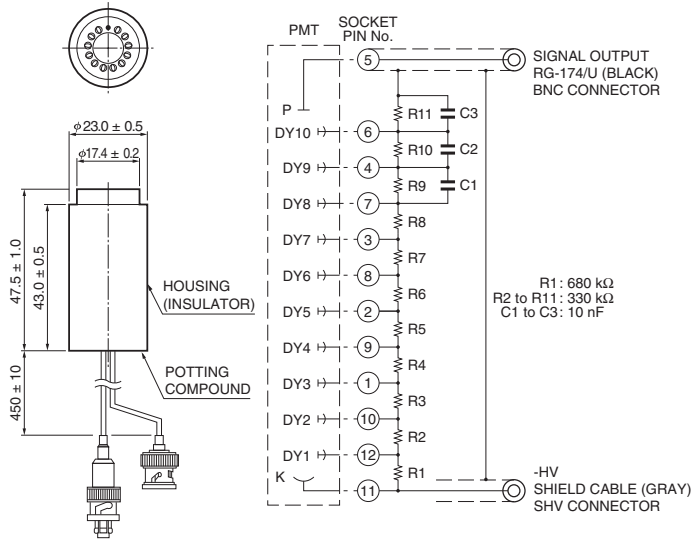
16 E2253-08



17 E974-29

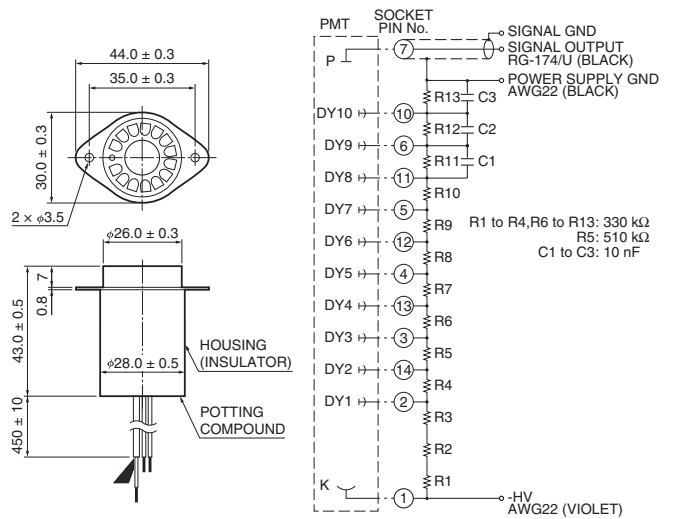


18 E974-18



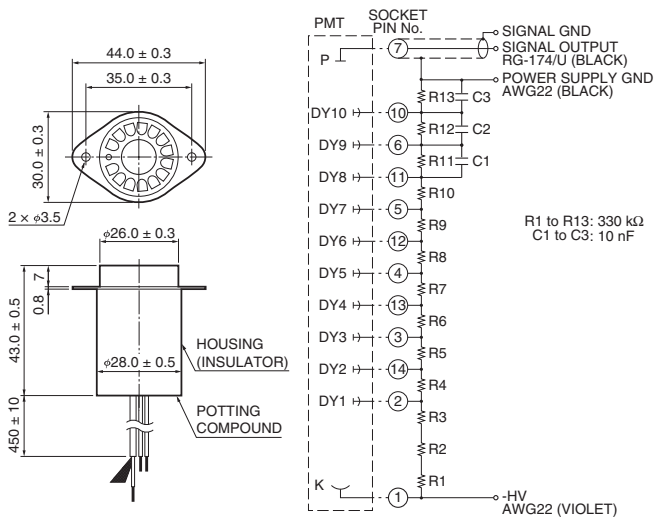
TACCA0213EB

19 E2924-11



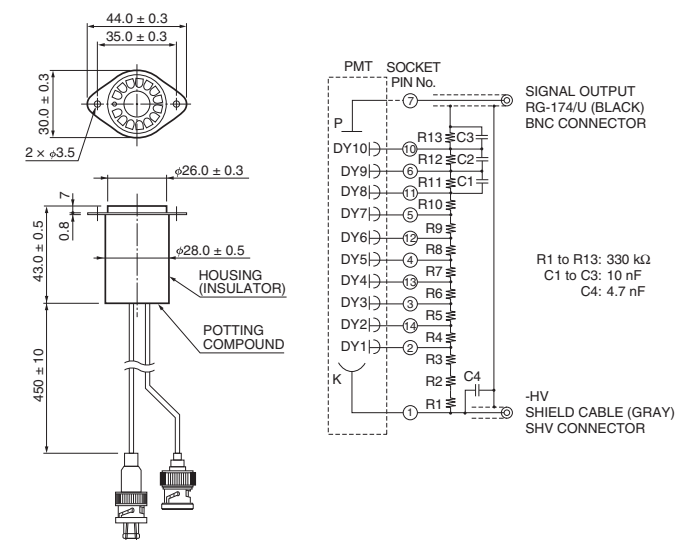
TACCA0032EC

20 E2924



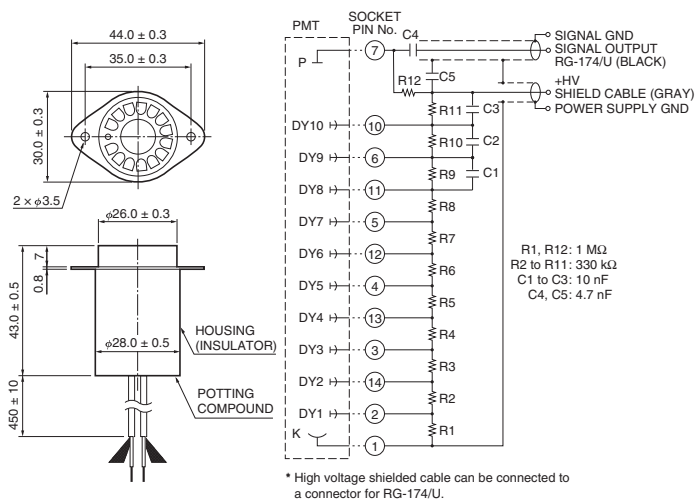
TACCA0032EC

21 E2924-500



TACCA0081EC

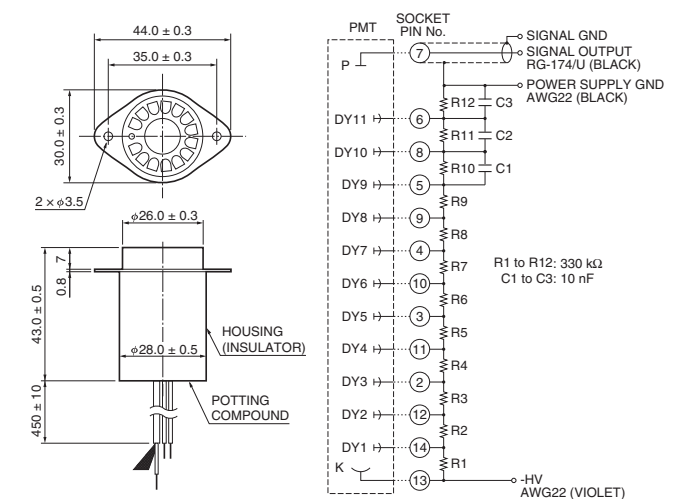
22 E2924-05



* High voltage shielded cable can be connected to a connector for RG-174/U.

TACCA0102EA

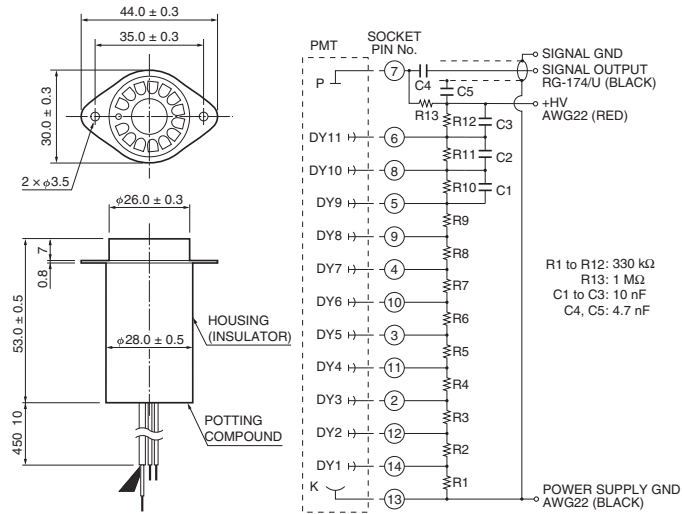
23 E990-07



TACCA0101EB

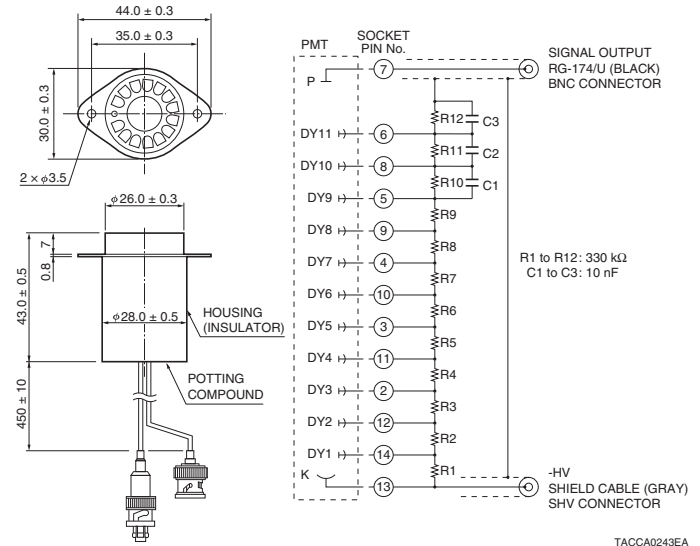
D-type socket assemblies dimensional outlines and diagrams (Unit: mm)

24 E990-08



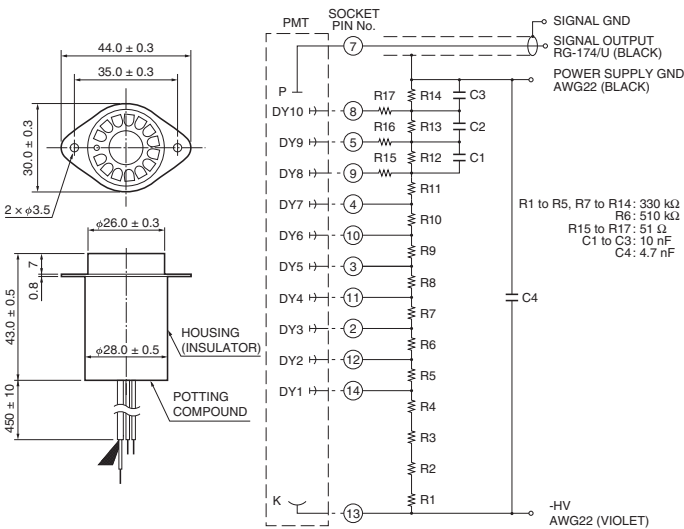
TACCA0103EB

25 E990-501



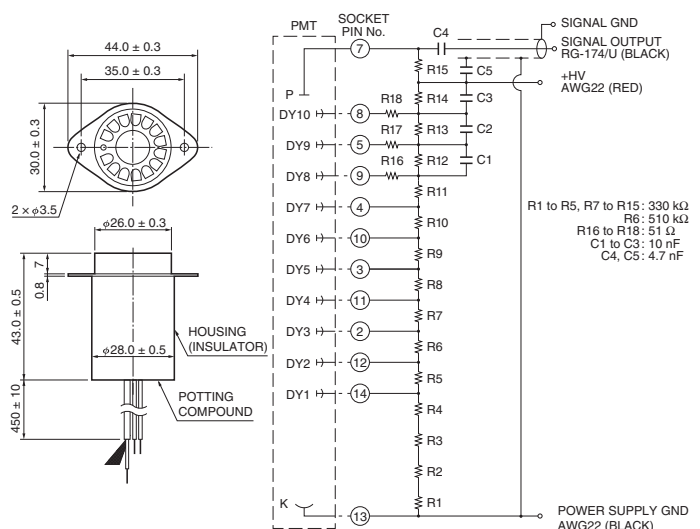
TACCA0243EA

26 E2624



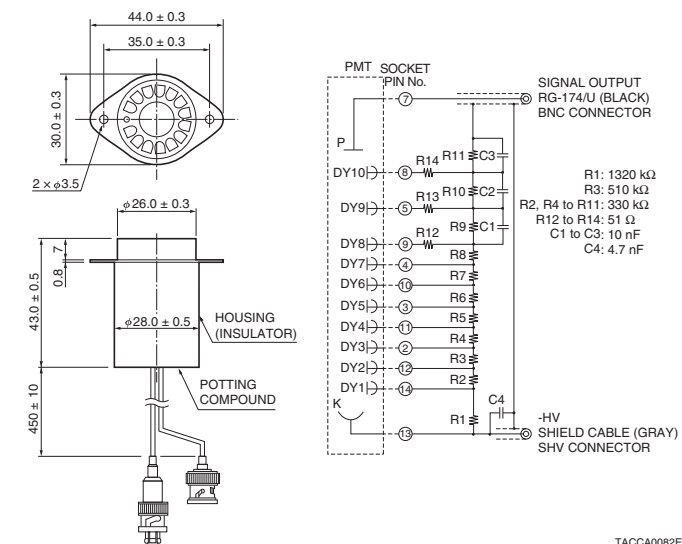
TACCA0216EB

27 E2624-05



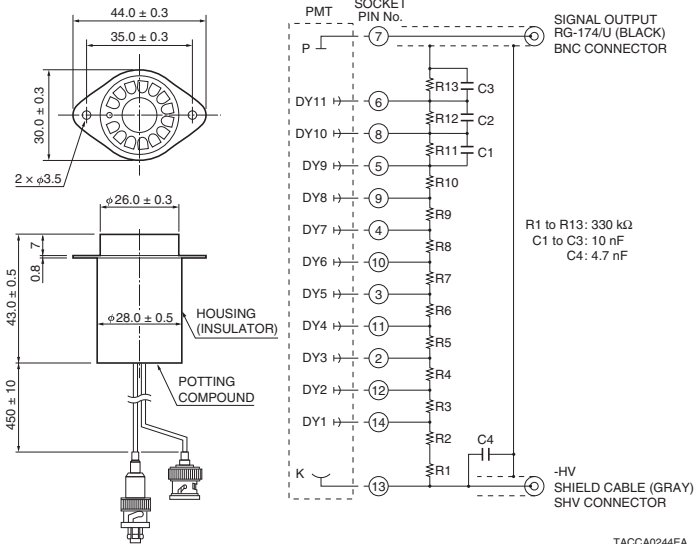
TACCA0217EC

28 E2624-14



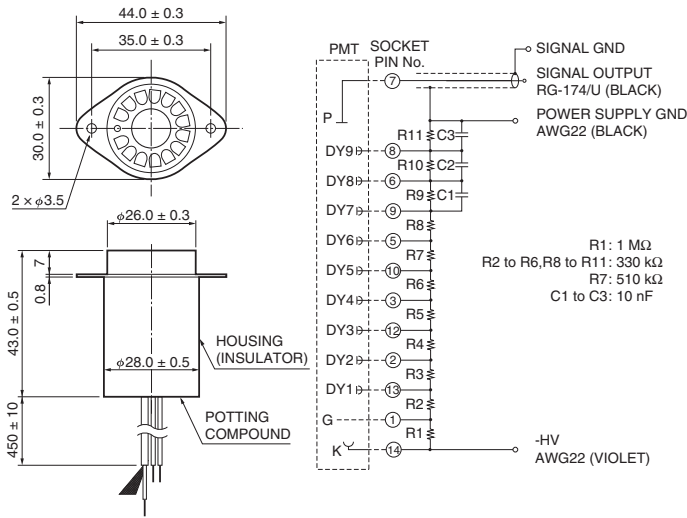
TACCA0082EC

29 E990-500



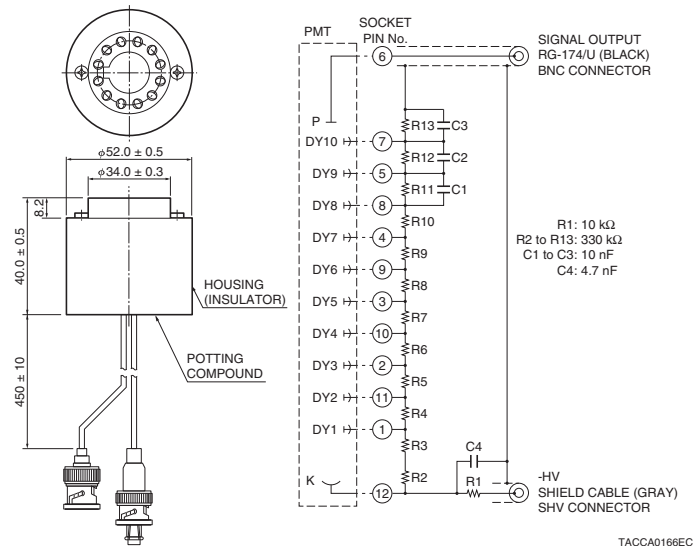
TACCA0244EA

30 E990-29



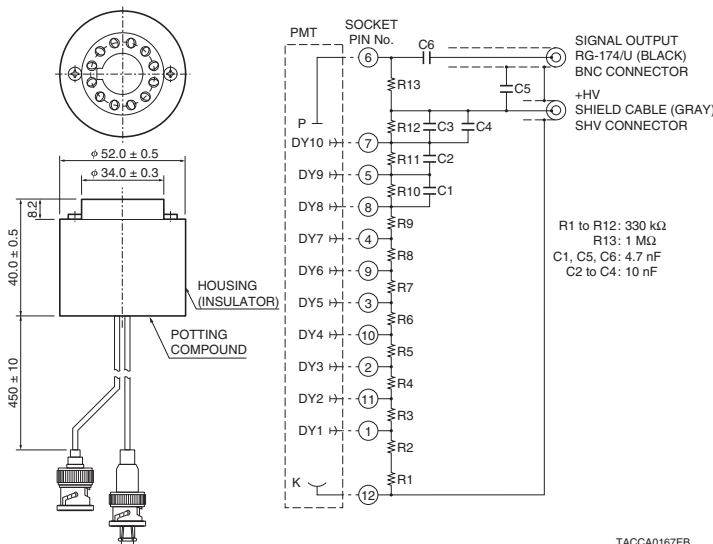
TACCA0215EB

31 E2183-500



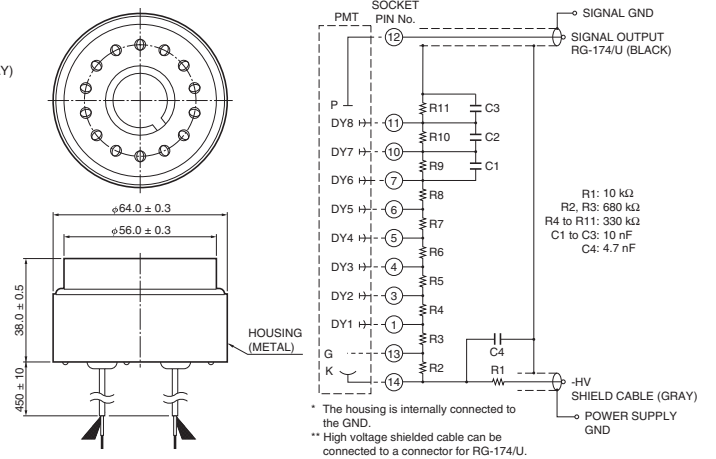
TACCA0168EC

32 E2183-502



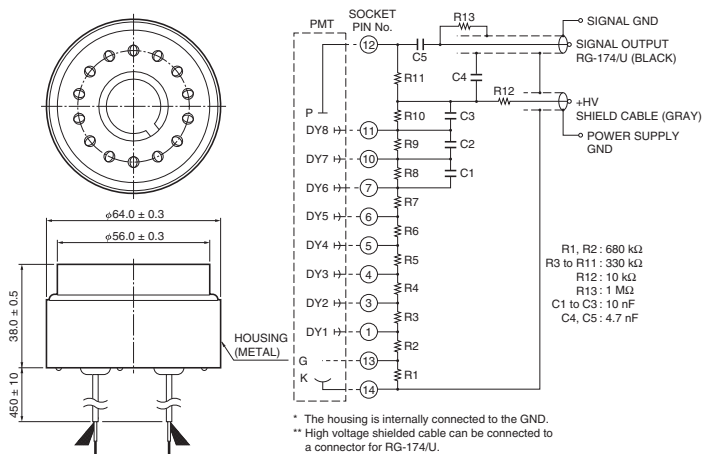
TACCA0167EB

33 E1198-26



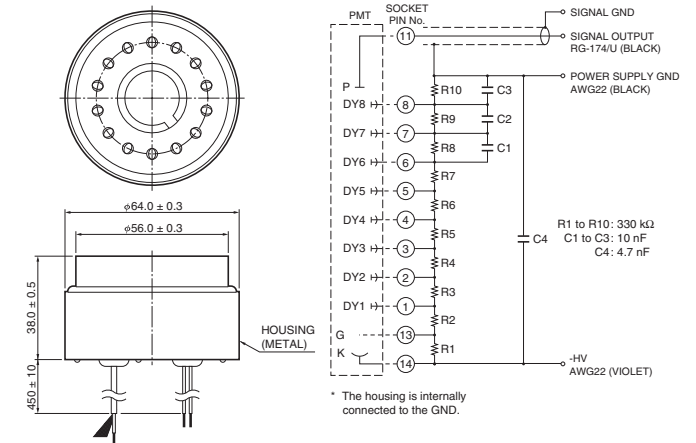
TACCA0224EC

34 E1198-27



TACCA0225EB

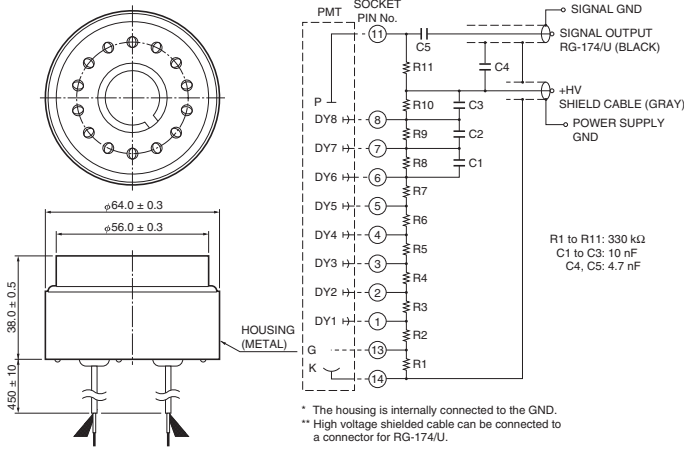
35 E1198-05



TACCA0221EB

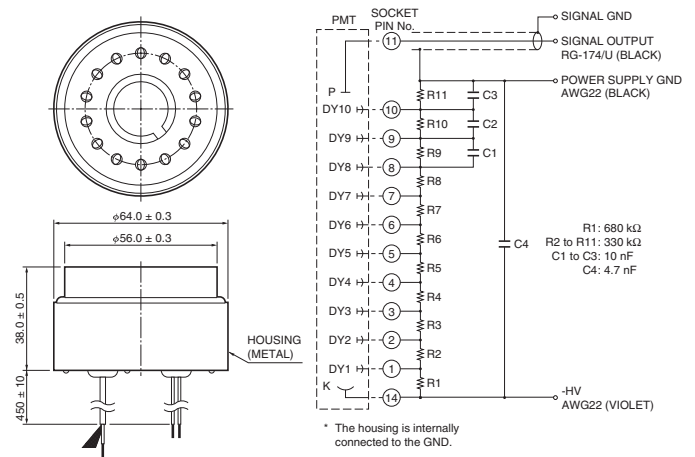
D-type socket assemblies dimensional outlines and diagrams (Unit: mm)

36 E1198-20



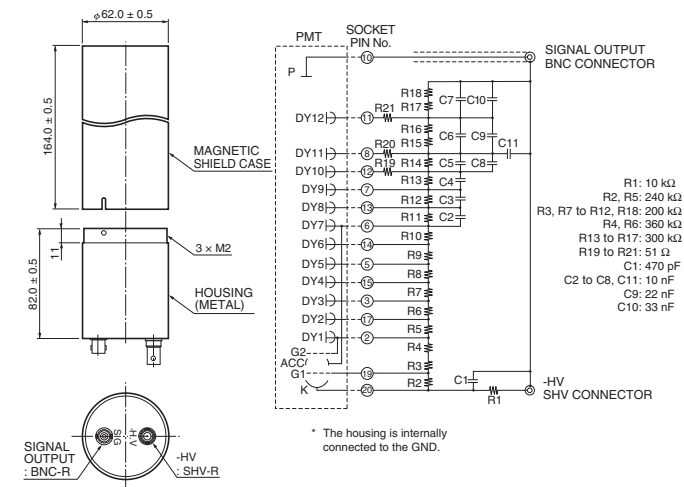
TACCA0223EB

37 E1198-07



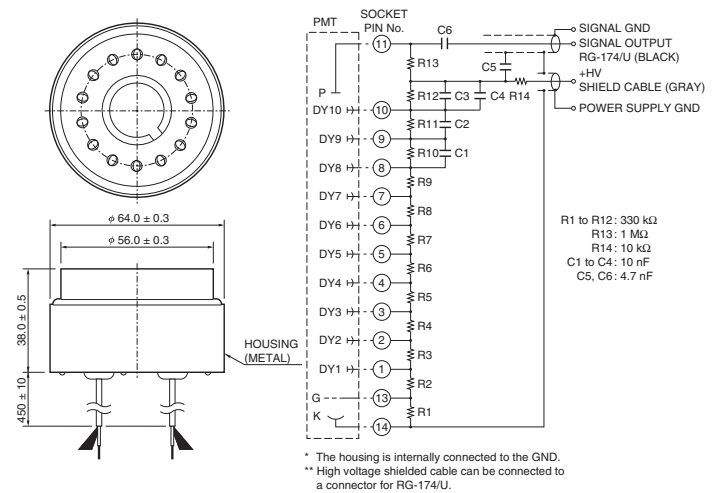
TACCA0220EC

38 E2979-500



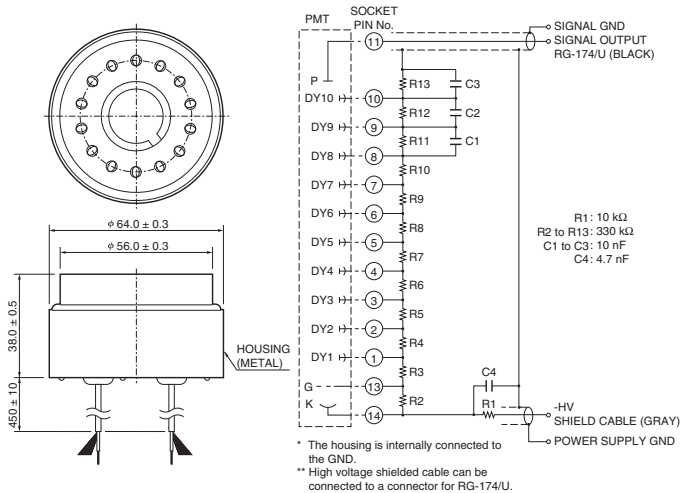
TACCA0093EB

39 E1198-23



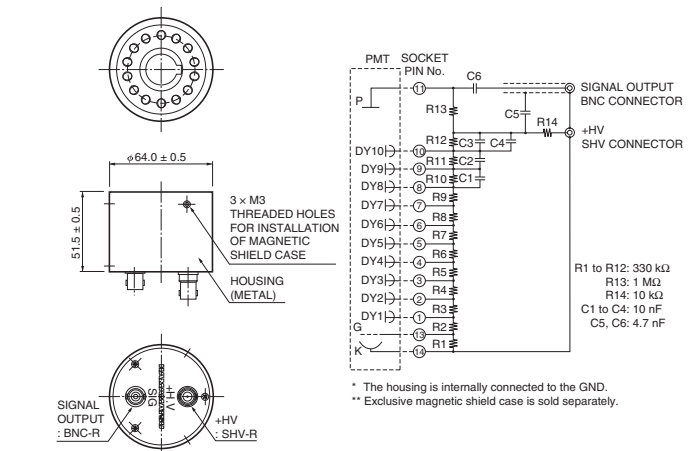
TACCA0169EC

40 E1198-22



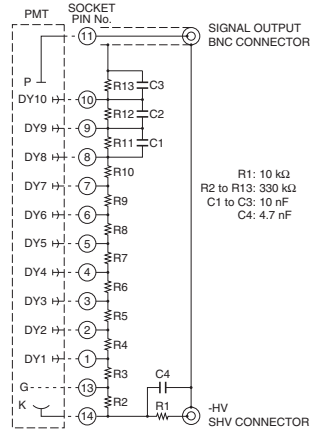
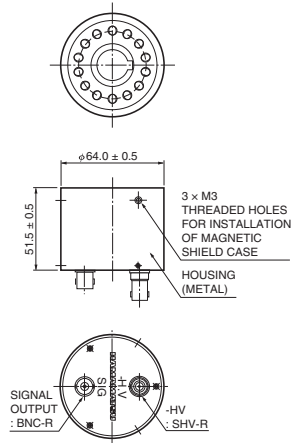
TACCA0168EB

41 E6316



TACCA0226EC

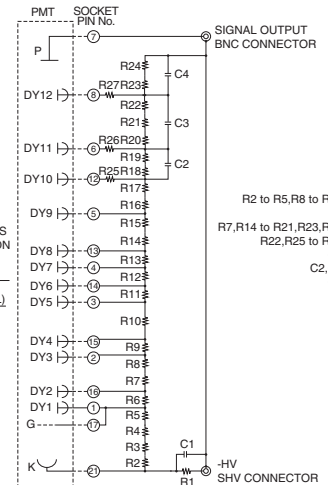
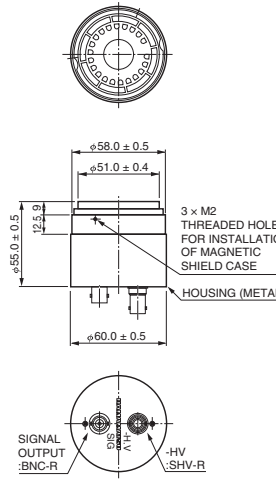
42 E6316-01



* The housing is internally connected to the GND.
** Exclusive magnetic shield case is sold separately

TACCA0245EB

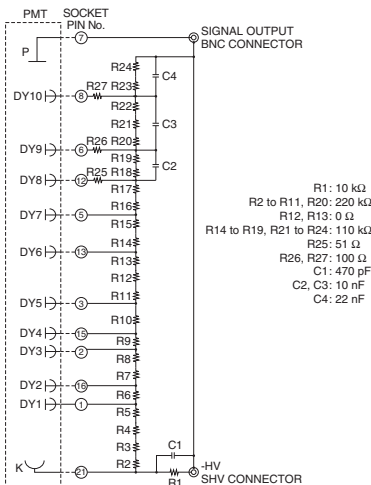
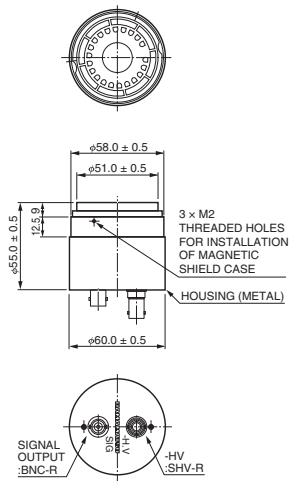
43 E5859-05



* The housing is internally connected to the GND.
** Magnetic shield case E989-62 is sold separately.

TACCA0219EC

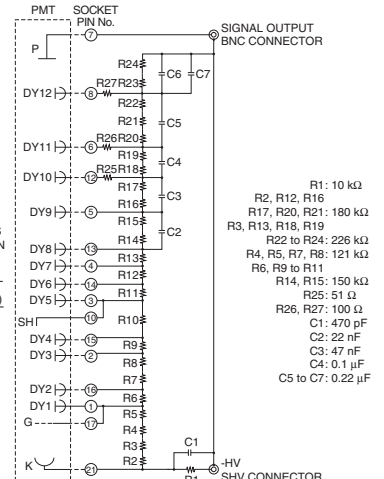
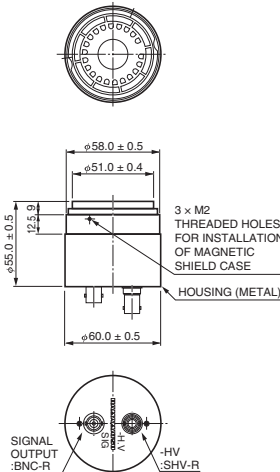
44 E5859-19



* The housing is internally connected to the GND.
** Exclusive magnetic shield case is sold separately

TACCA0305EA

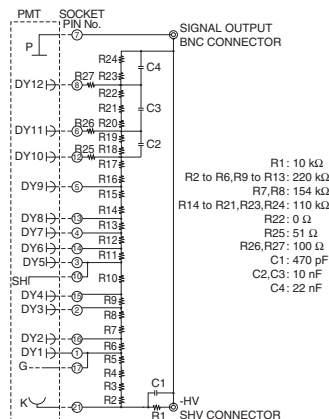
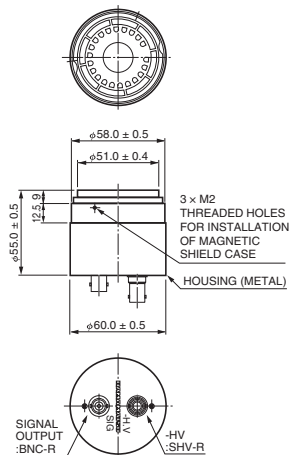
45 E5859



* The housing is internally connected to the GND.
** Magnetic shield case E989-62 is sold separately.

TACCA0176ED

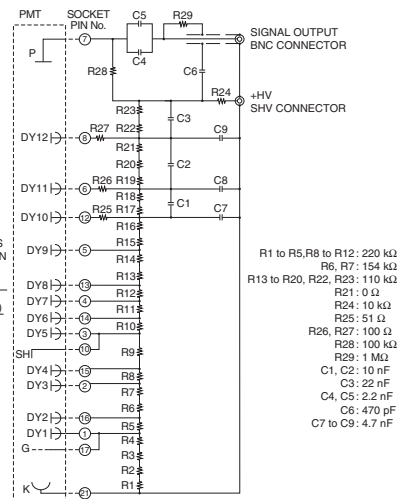
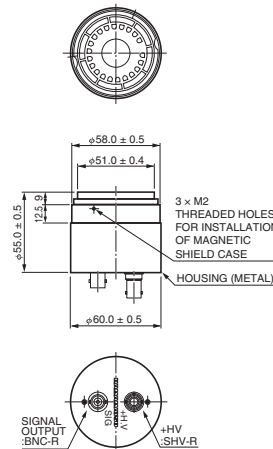
46 E5859-01



* The housing is internally connected to the GND.
** Magnetic shield case E989-62 is sold separately.

TACCA0178EC

47 E5859-03

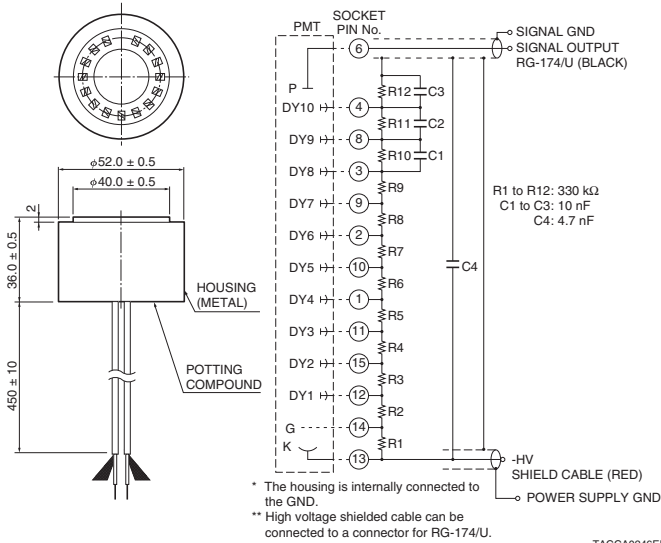


* The housing is internally connected to the GND.
** Magnetic shield case E989-62 is sold separately.

TACCA0218EE

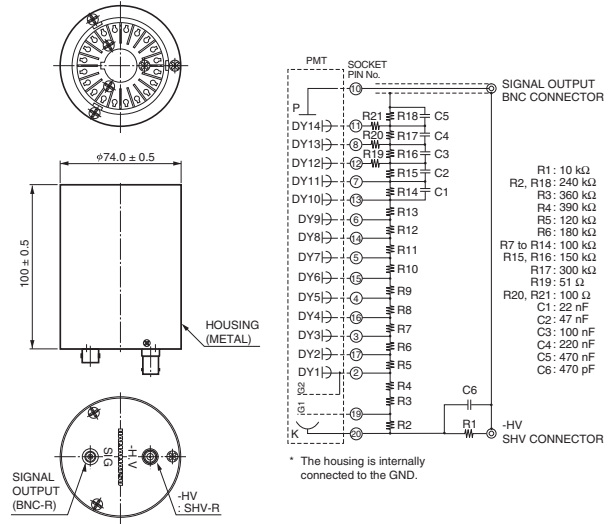
D-type socket assemblies dimensional outlines and diagrams (Unit: mm)

48 E1435-02



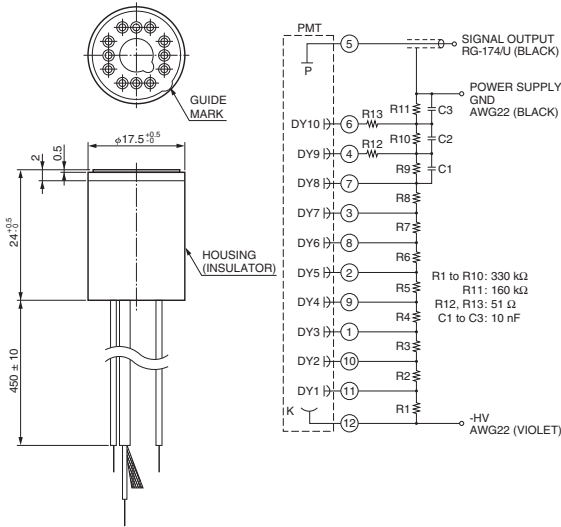
TACCA0246B

49 E7693



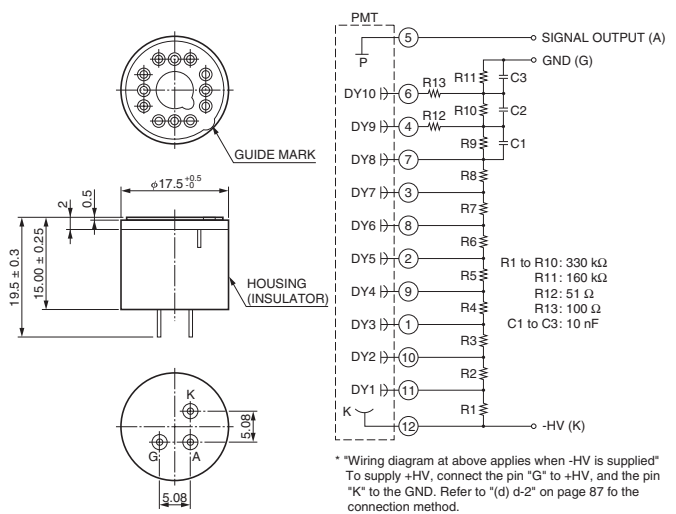
TACCA0227EC

50 E10679-02



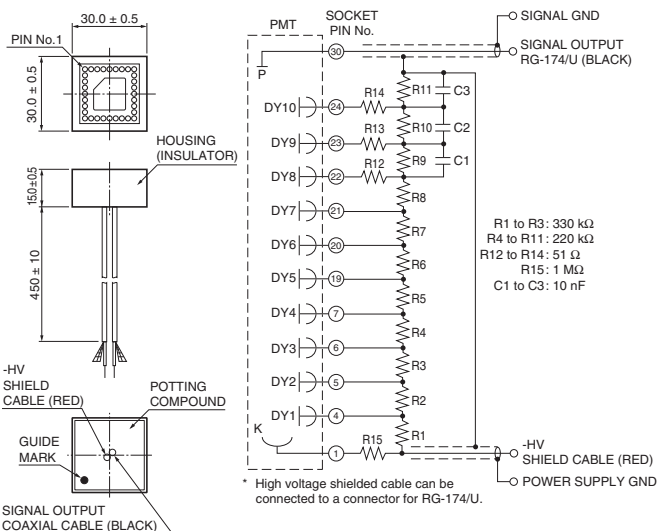
TACCA0299EB

51 E10679-51



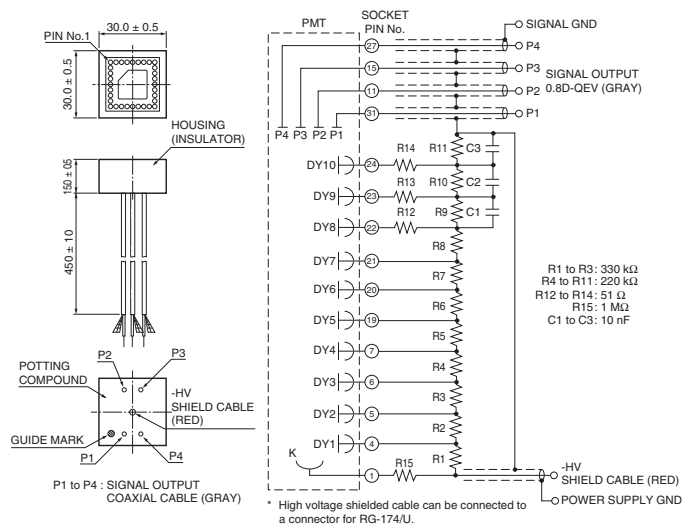
TACCA0326EA

52 E5996



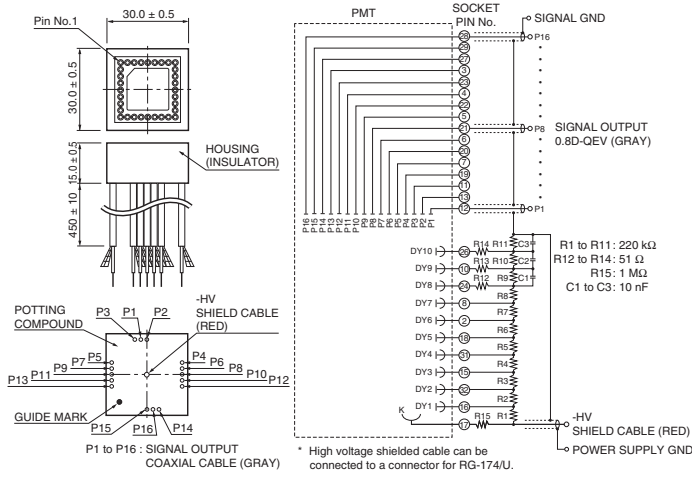
TACCA0234EC

53 E7083



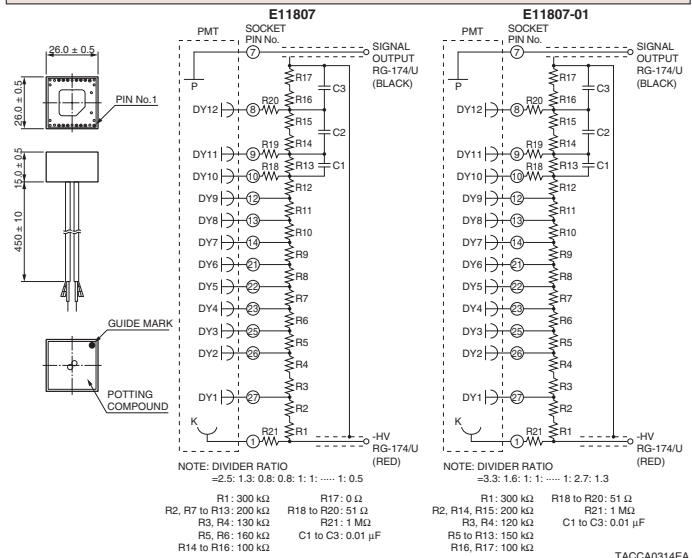
TACCA0162ED

54 E6736



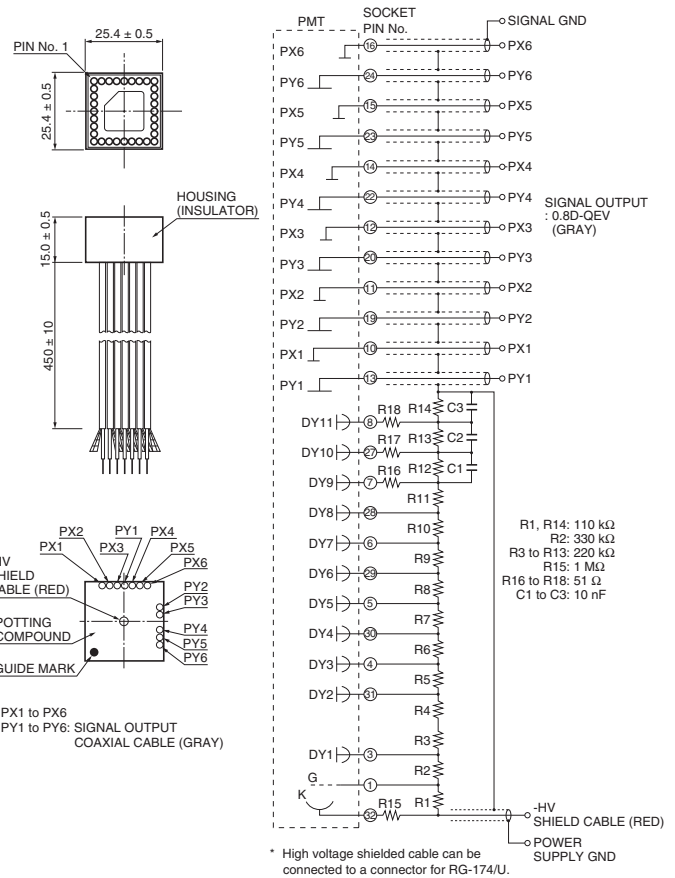
TACCA0158ED

56 E11807/E11807-01



TACCA0314EA

55 E7514



TACCA0236ED

Information in this catalog is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. © 2020 Hamamatsu Photonics K.K.

Please thoroughly read the precautions and the prohibited uses included in the user manual before installation and use.