

 **TOSHIBA**

VIDICON TUBES

- High Sensitivity ● High Resolution ● High Picture Quality
- Wide Products Range for Versatile Purpose



Toshiba Vidicon Tubes Feature

- High Sensitivity
- High Resolution
- High Picture Quality
- Wide Products Range for Versatile Purpose

Toshiba manufactures Vidicon tubes in four diameter sizes according to the purpose and performance 1" type is the most popular, 2/3" type is appreciated for its compactness and for high resolution 1.5" types are available.

In each size of diameter further classified specifications are provided for the best fit for the customers wide variety of applications.

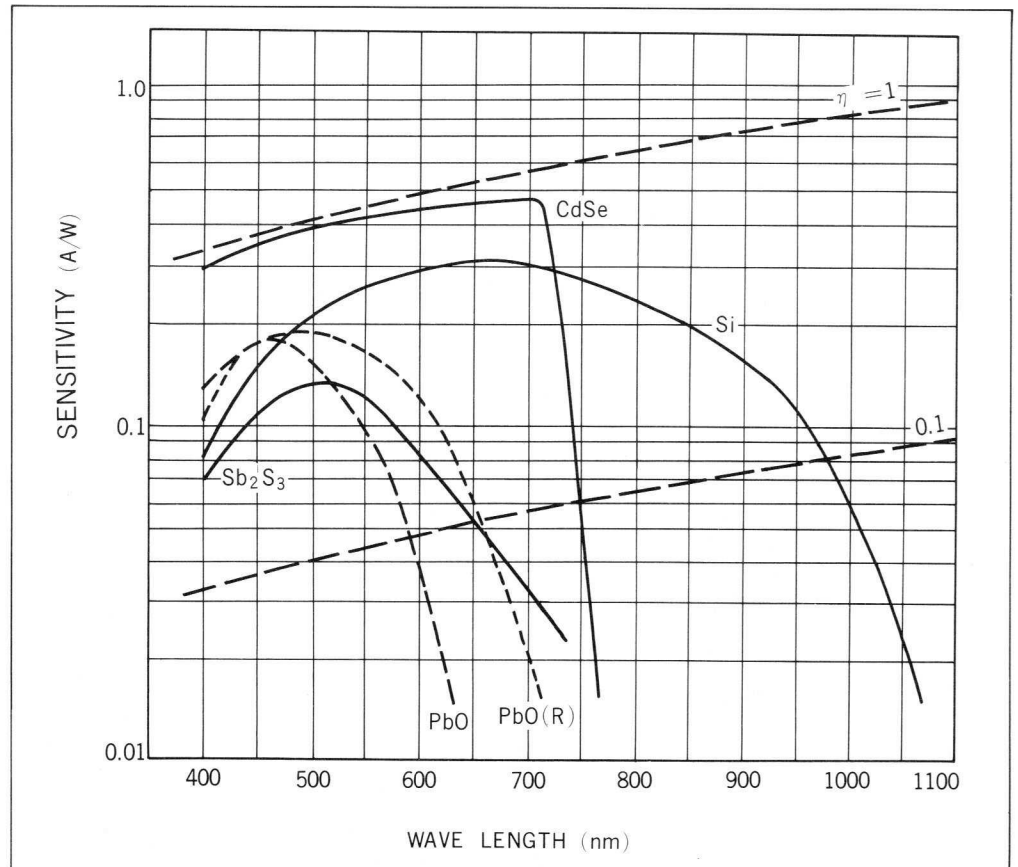


SELECTION GUIDES

	Magnetic - Focus Magnetic - Deflection Vidicons			Electrostatic - Focus Magnetic - Deflection Vidicons			Electrostatic- Focus Electrostatic- Deflection Vidicons	Heater Power
	2/3" (18)	1" (25)	1.2" (30)	2/3" (18)	1" (25)	1.5" (40)	1" (25)	
Integral Mesh Connection		7262A						◀ 0.6 W
		7735A						◀ 3.8 W
Separate Mesh Connection	8844 8844 (W) □ E5022 □ E5092 ○ E5052 □ E5061	E5080 8541 8573 ○ E5036 □ E5001 □ E5063		□ E5071 E5045 □ E5037 □ E5062 □ E5097	8134 □ E5068	8480	25PE 12	◀ 0.6 W
			△ E5040 △ E5054 △ E5055					◀ 1.9 W
		8507						◀ 3.8 W

○ Si Vidicon
□ CHALNICON (CdSe)
△ Pbo Vidicon

SPECTRAL SENSITIVITY of
TOSHIBA VIDICONS



VIDICON

Type	Typical Applications	Remarks	Dimensions			Pin Connection
			Size (inch)	Overall Length (mm)	Diameter (mm)	
7262A	Compact, Industrial Transistorized TV Cameras	<ul style="list-style-type: none"> ◦ Short Type ◦ Low Power (0.6W) Heater ◦ High Sensitivity 	1	130	28.6	A
7735A	Live TV and Industrial Cameras	<ul style="list-style-type: none"> ◦ High Sensitivity 	1	159	28.6	A
8134	Live TV and Industrial Transistorized Cameras, Color TV Film Pickup	<ul style="list-style-type: none"> ◦ Electrostatic Focus and Magnetic Deflection ◦ Low Power (0.6W) Heater 	1	159	28.6	C
8480	Transistorized Cameras for Broadcast Film Pickup and Data Transmission Applications	<ul style="list-style-type: none"> ◦ 1-1/2" Diameter Type ◦ Electrostatic Focus Magnetic Deflection ◦ Low Power (0.6W) Heater ◦ Very High Resolution ◦ Separate Mesh Connection 	1.5	260	40.4	G
8507	Live and Film TV, and Industrial Pickup Service	<ul style="list-style-type: none"> ◦ Similar to the 7735A But Has Separate Mesh and Wall Electrodes ◦ High Resolution 	1	159	28.6	B
8541	Live and Film TV, and Industrial Transistorized Cameras	<ul style="list-style-type: none"> ◦ Similar to the 8507 But Has Low Power (0.6W) Heater 	1	159	28.6	B
8573	Live and Film TV, and Industrial TV Cameras	<ul style="list-style-type: none"> ◦ Short Type ◦ Low Power (0.6W) Heater ◦ Separate Mesh Connection ◦ High Resolution 	1	130	28.6	B
8844	Compact Transistorized Industrial TV Cameras	<ul style="list-style-type: none"> ◦ Very Short 2/3"-Diameter Type ◦ Low Power (0.6W) Heater ◦ Separate Mesh Connection ◦ Higher Resolution ◦ Low Lag 	2/3	100	19.6	D
8844(W)	Compact Transistorized Industrial TV Cameras	<ul style="list-style-type: none"> ◦ High Sensitivity ◦ Very Short 2/3"-Diameter Type ◦ Low Power (0.6W) Heater ◦ Separate Mesh Connection ◦ Higher Resolution ◦ Low Lag 	2/3	100	19.6	D
25PE12	Compact, Transistorized Industrial TV Cameras for Special Scanning Systems	<ul style="list-style-type: none"> ◦ Electrostatic Focus and Deflection ◦ Low Power (0.6W) Heater 	1	159	28.6	F
E5045	Compact Industrial TV Cameras	<ul style="list-style-type: none"> ◦ Very Short 2/3"-Diameter Type ◦ Low Power (0.6W) Heater ◦ Separate Mesh Connection ◦ Electrostatic Focus and Magnetic Deflection 	2/3	106	19.6	E
E5080	Single Tube Color TV Cameras	<ul style="list-style-type: none"> ◦ Contains Striped Encording Filters ◦ High Resolution ◦ Uniform Signal Amplitude over the Entire Picture ◦ Negligible Dark Shading 	1	159	28.6	B

Cathode		Focusing Method	Deflection Method	Typical Performance Data						Type
Ef (V)	If (mA)			Faceplate Illumination Intensity (lx)	Target Voltage (V)	Dark Current (μ A)	Signal Output Current (μ A)	Limiting Center Resolution (TV Lines)	Amplitude response at 400 TV lines	
6.3	95	M	M	10	10 ~ 50	0.02	0.20	700C	30	7262A
6.3	600	M	M	10	10 ~ 50	0.02	0.20	700C	30	7735A
6.3	95	S	M	10	10 ~ 50	0.02	0.20	750C	35b	8134
6.3	95	S	M	80	10 ~ 50	0.02	0.40	1200C	60b	8480
6.3	600	M	M	10	10 ~ 50	0.02	0.20	750C	50b	8507
6.3	95	M	M	10	10 ~ 50	0.02	0.20	750C	50b	8541
6.3	95	M	M	5	10 ~ 50	0.10	0.27	750C	50b	8573
6.3	95	M	M	15	10 ~ 50	0.02	0.20	700C	30b	8844
6.3	95	M	M	10	10 ~ 50	0.02	0.33	700C	30b	8844(W)
6.3	95	S	S	10	10 ~ 50	0.02	0.20	500C	10	25PE12
6.3	95	S	M	15	10 ~ 40	0.02	0.20	600C	15	E5045
6.3	95	M	M	10	10 ~ 50	0.02	0.20	1200C	60b	E5080

Focus Method M: Magnetic Focus, S: Electrostatic Focus
 Deflection Method M: Magnetic Deflection, S: Electrostatic Deflection

C Center Resolution
 b High Voltage

SI VIDICON (Silicon Diode Array Target Vidicon)

Type	Typical Applications	Remarks	Dimensions			Pin Connection
			Size (inch)	Overall Length (mm)	Diameter (mm)	
E5036 (E5058)	TV Telephone Industrial Special TV Cameras	<ul style="list-style-type: none"> ◦ Extremely High Sensitivity ◦ No Burn - In ◦ Extremely Low Lag ◦ Very Low Dark Current 	1	159 (130)	28.6	B
E5052	TV Telephone Compact, Industrial Special TV Cameras	<ul style="list-style-type: none"> ◦ Extremely High Sensitivity ◦ No Burn - In ◦ Extremely Low Lag ◦ Very Low Dark Current 	2/3	100	19.6	D

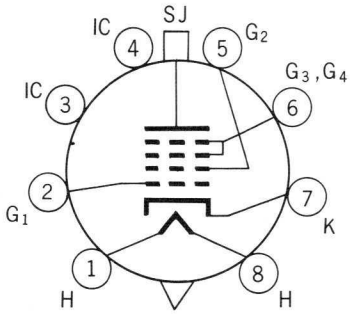
CHALNICON (Cadmium Selenide photoconductive target Vidicon)

E5001 (E5091 E5001(D))	Security Observation TV, and X-ray TV Cameras	<ul style="list-style-type: none"> ◦ Extremely High Sensitivity ◦ High Resolution ◦ No Burn-in Damage ◦ Negligible Blooming-Effect 	1	159	28.6	B
E5022 (E5072 E5072(D))	Security Observation TV, and Industrial Color TV Cameras	<ul style="list-style-type: none"> ◦ Extremely High Sensitivity ◦ No Burn-in Damage ◦ Very Low Dark Current ◦ Wide Spectral Response 	2/3	100	19.6	D
E5071 (E5071(D))	Compact Industrial Color TV Cameras	<ul style="list-style-type: none"> ◦ Extremely High Sensitivity ◦ Electrostatic Focus ◦ Wide Spectral Response 	2/3	106	19.6	D
E5060	Industrial or Educational CCTV Color Cameras	<ul style="list-style-type: none"> ◦ Wide Spectral Response ◦ Very Low Dark Current ◦ No Burn-in Damage ◦ Contains Striped Encoding Filter 	2/3	100	19.6	D
E5061 (E5093)	Live Pick-up Color TV, and Industrial Color TV Cameras	<ul style="list-style-type: none"> ◦ Wide Spectral Response ◦ High Resolution ◦ Very Low Dark Current ◦ Negligible Flare-Effect ◦ Low Lag Phenomena 	2/3	100	19.6	D
E5062 (E5067)	Medical Compact Color TV Camera	<ul style="list-style-type: none"> ◦ Wide Spectral Response ◦ Easy Registration Adjustment ◦ Low Lag Phenomena 	2/3	117	19.6	
E5092	Live Pick-up Color TV Cameras	<ul style="list-style-type: none"> ◦ Low Lag Phenomena ◦ Very Low Dark Current ◦ Easy Registration Adjustment 	2/3	100	19.6	D
E5097 (E5098)	Broadcast Handy Color TV Cameras	<ul style="list-style-type: none"> ◦ Low Lag Phenomena ◦ High Resolution ◦ Low Geometric Distortion ◦ Easy Registration Adjustment 	2/3	117	19.6	
E5063 (E5153 E5063(X))	Film Pick-up Color TV, and X-ray TV Cameras	<ul style="list-style-type: none"> ◦ Extremely High Sensitivity ◦ Low Lag Phenomena ◦ No Burn-in Damage 	1	159	19.6	B

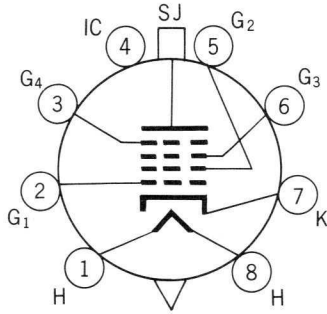
Cathode		Focusing Method	Deflection Method	Typical Performance Data						Type
Ef (V)	If (mA)			Faceplate Illumination Intensity (lx)	Target Voltage (V)	Dark Current (μ A)	Signal Output Current (μ A)	Limiting Center Resolution (TV Lines)	Amplitude Response at 400 TV lines	
6.3	95	M	M	0.5	6 ~ 10	8	0.38	550C	15	E5036
6.3	95	M	M	0.5	6 ~ 10	4	0.20	400C	6	E5052

6.3	95	M	M	0.5	20 ~ 45	0.8	0.16	750C	40	E5001
6.3	95	M	M	1	20 ~ 45	0.4	0.16	650C	30b	E5022
6.3	95	S	M	1	20 ~ 45	0.4	0.16	600C	20	E5071
6.3	95	M	M	1	20 ~ 45	0.4	0.16	650C	20	E5060
6.3	95	M	M	1	20 ~ 45	0.4	0.16	600C	25b	E5061
6.3	95	S	M	1	20 ~ 45	0.4	0.16	600C	20	E5062
6.3	95	M	M	1	20 ~ 45	0.4	0.16	650C	25b	E5092
6.3	95	S	M	1	20 ~ 45	0.4	0.16	700C	25b	E5097
6.3	95	M	M	1	20 ~ 45	0.8	0.16	750C	45b	E5063

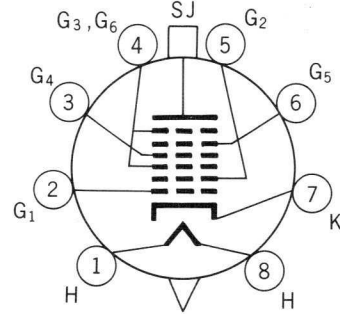
PIN CONNECTION



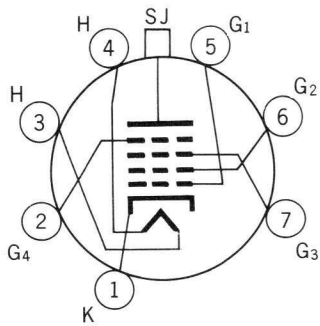
A



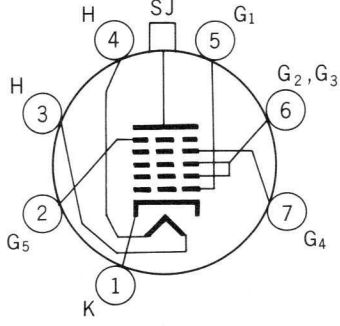
B



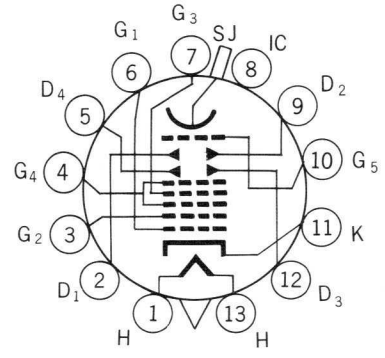
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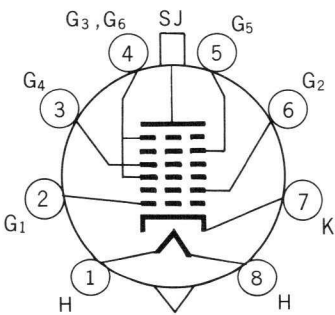
D



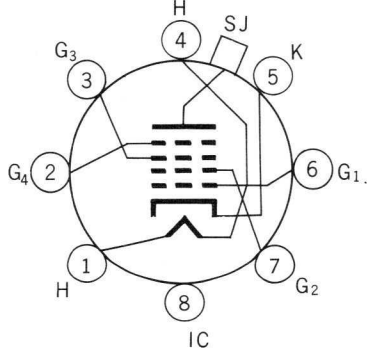
E



F



G

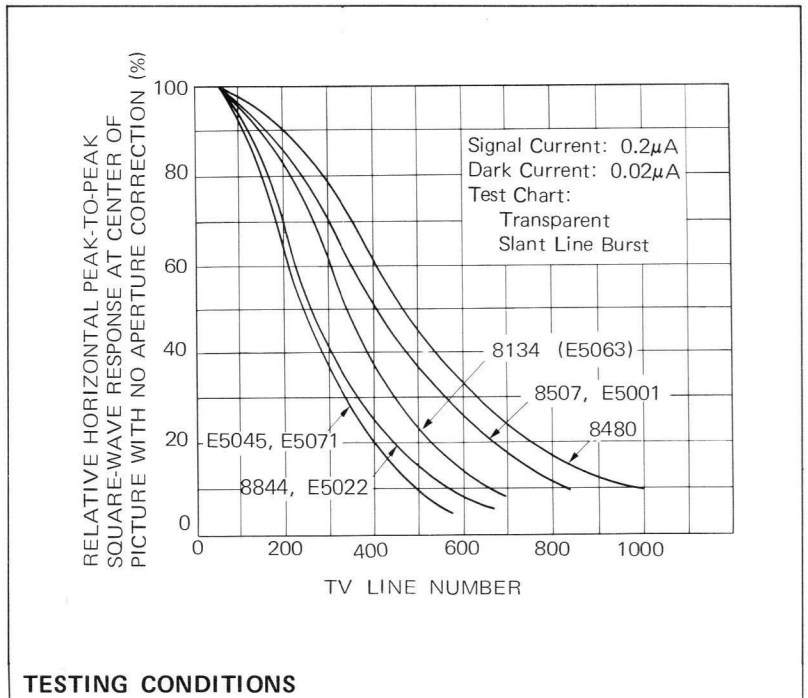


H

- HHeater
- KCathode
- GGrid
- SJ.....Signal Electrode
- DDeflection Plate
- ICInternal Connection
(Do not use)

TYPICAL CHARACTERISTICS

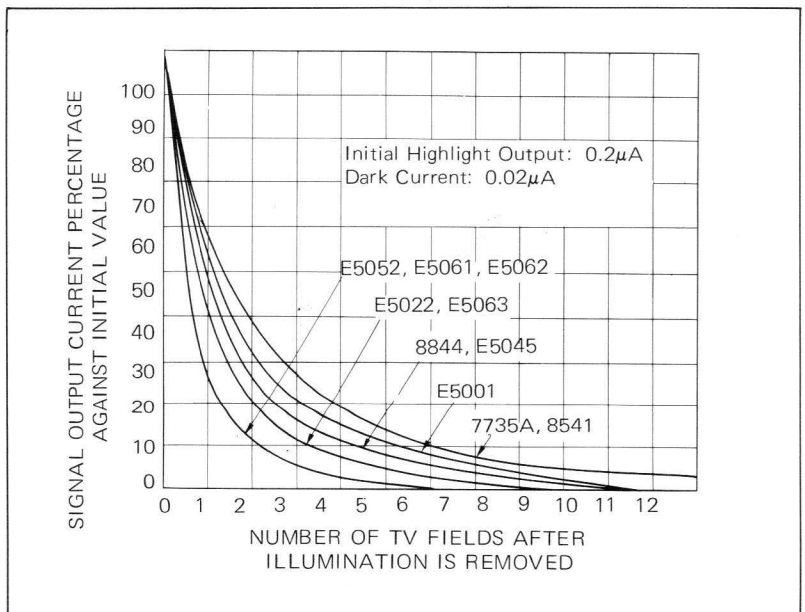
HORIZONTAL SQUARE - WAVE RESPONSE



TESTING CONDITIONS

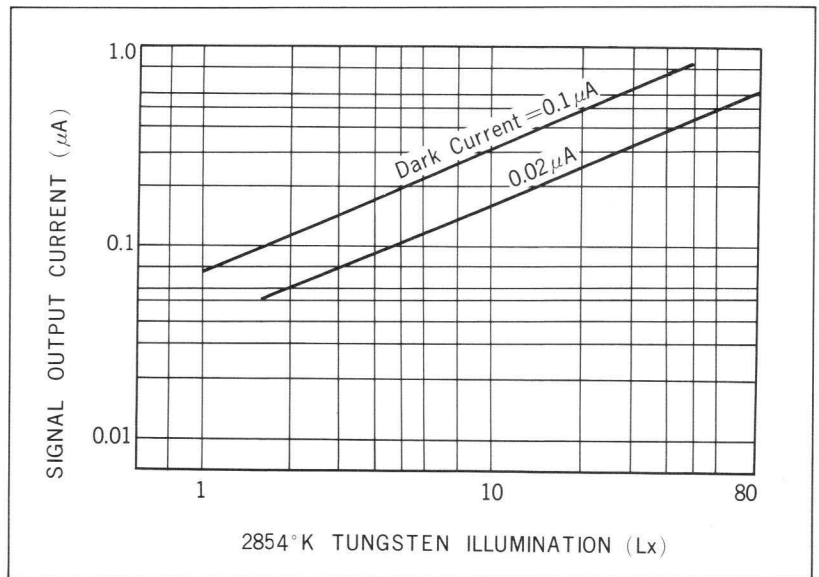
	Focus Coil	Ec3	Ec4	Ec5	Ec6
8844, E5022	50G	300V	500V		
E5045, E5071	—	300V		500V	
8507, E5001	53G	450V	750V		
8134, (E5063)	— (41G)	(300V)	(500V)	300V	500V
8480	—			840V	1400V

TYPICAL PERSISTENCE CHARACTERISTICS



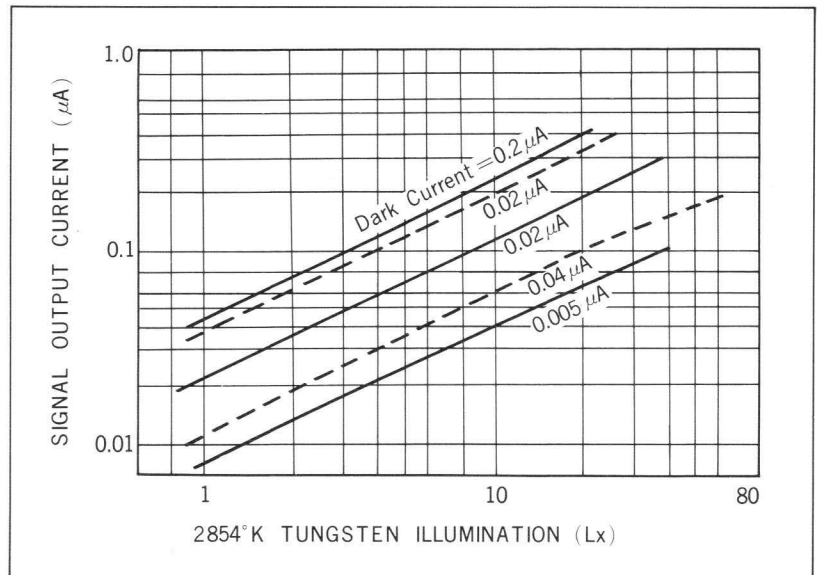
LIGHT TRANSFER CHARACTERISTICS

7262A, 7735A, 8507, 8541, E5080

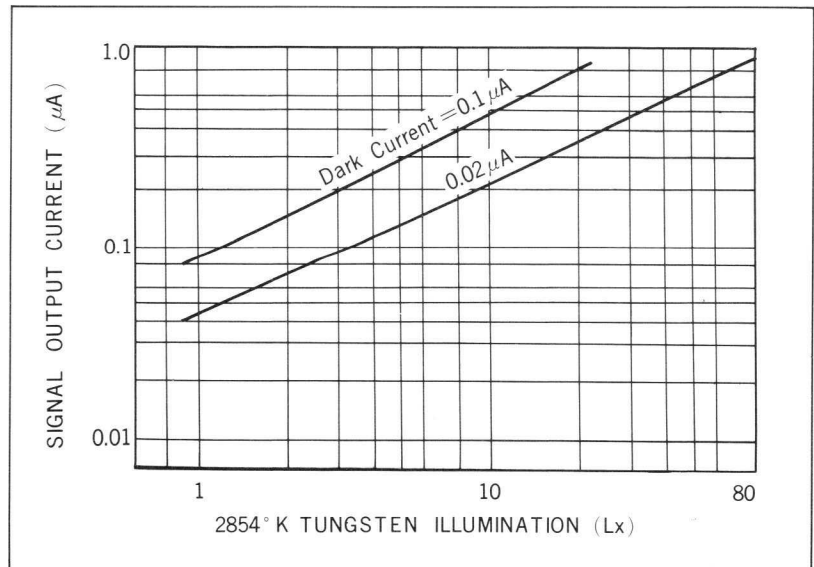


8480, 8134

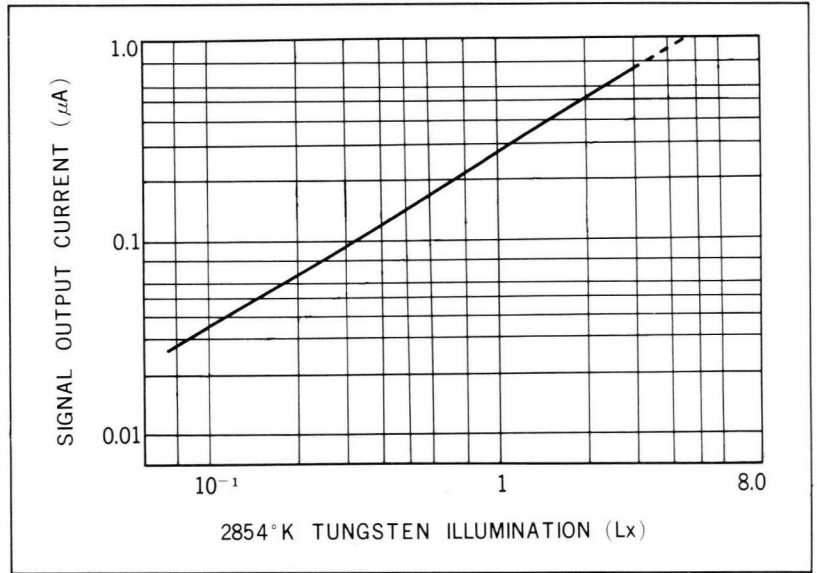
————— 8480
- - - - - 8134



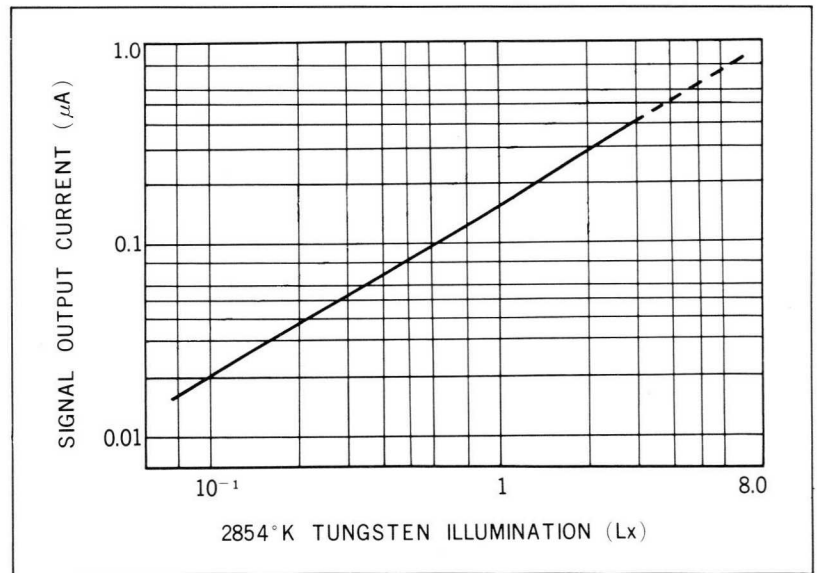
8844, E5045



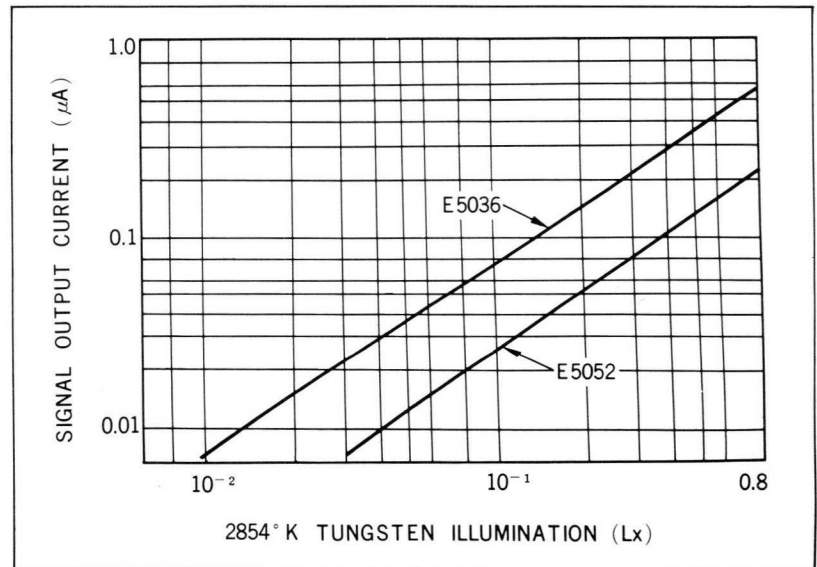
CHALNICON E5001, E5063



CHALNICON E5022, E5071,
E5060, E5061, E5062, E5092, E5097



Si-VIDICON E5036, E5052





TOSHIBA

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