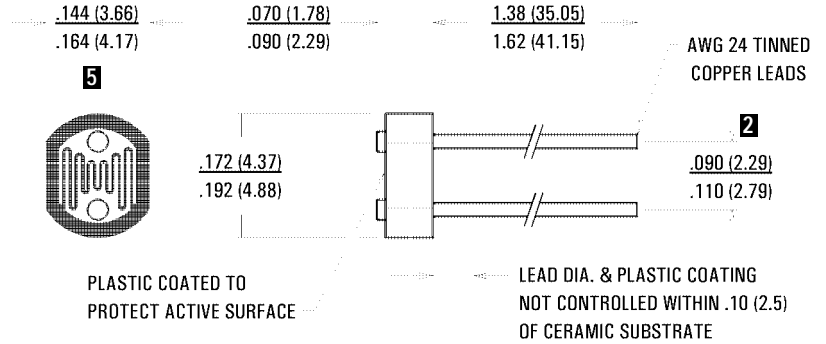


PACKAGE DIMENSIONS inch (mm)



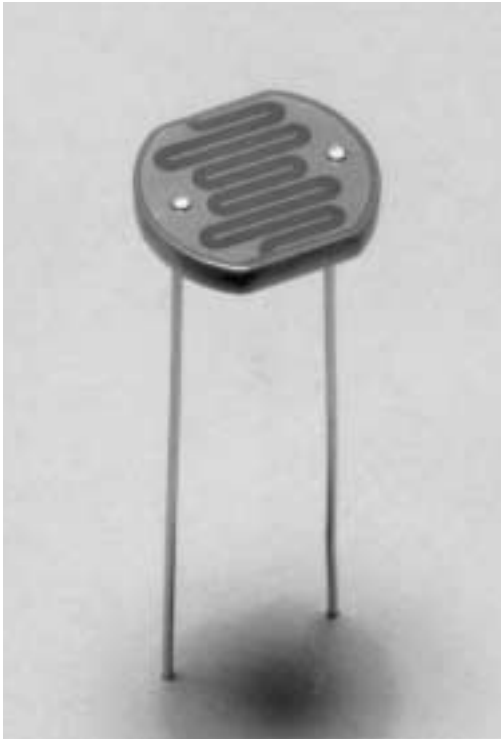
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Units
Continuous Power Dissipation Derate Above 25°C	P_D $\Delta P_D / \Delta T$	80 1.6	mW mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

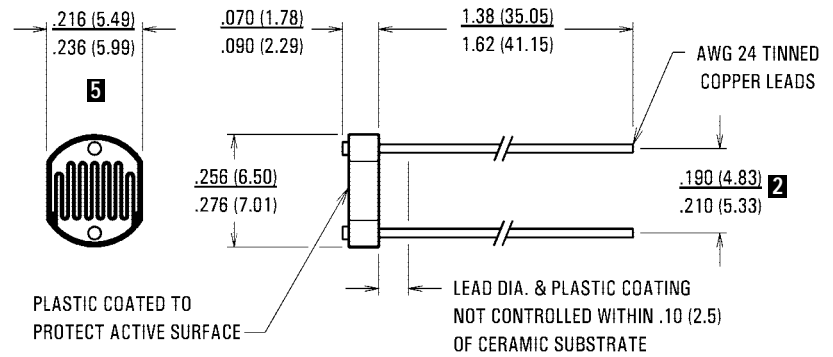
ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.) 4

Part Number	Resistance (Ohms) 3 6						Material Type	Sensitivity (γ , typ.) $\frac{\text{LOG}(R_{10}/R_{100})}{\text{LOG}(100/10)}$	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)		
	10 lux 2850 K			2 fc 2850 K	Dark					Rise (1-1/e)	Fall (1/e)	
	Min.	Typ.	Max.	Typ.	Min.	sec.						
VT9ØN1	6 k	12 k	18 k	6 k	200 k	5	Ø	0.80	100	78	8	
VT9ØN2	12 k	24 k	36 k	12 k	500 k	5	Ø	0.80	100	78	8	
VT9ØN3	25 k	50 k	75 k	25 k	1 M	5	Ø	0.85	100	78	8	
VT9ØN4	50 k	100 k	150 k	50 k	2 M	5	Ø	0.90	100	78	8	
VT93N1	12 k	24 k	36 k	12 k	300 k	5	3	0.90	100	35	5	
VT93N2	24 k	48 k	72 k	24 k	500 k	5	3	0.90	100	35	5	
VT93N3	50 k	100 k	150 k	50 k	500 k	5	3	0.90	100	35	5	
VT93N4	100 k	200 k	300 k	100 k	500 k	5	3	0.90	100	35	5	
VT935G												
1	Group A	10 k	18.5 k	27 k	9.3 k	1 M	5	3	0.90	100	35	5
	Group B	20 k	29 k	38 k	15 k	1 M	5	3	0.90	100	35	5
	Group C	31 k	40.5 k	50 k	20 k	1 M	5	3	0.90	100	35	5

See page 13 for notes.



PACKAGE DIMENSIONS inch (mm)



ABSOLUTE MAXIMUM RATINGS

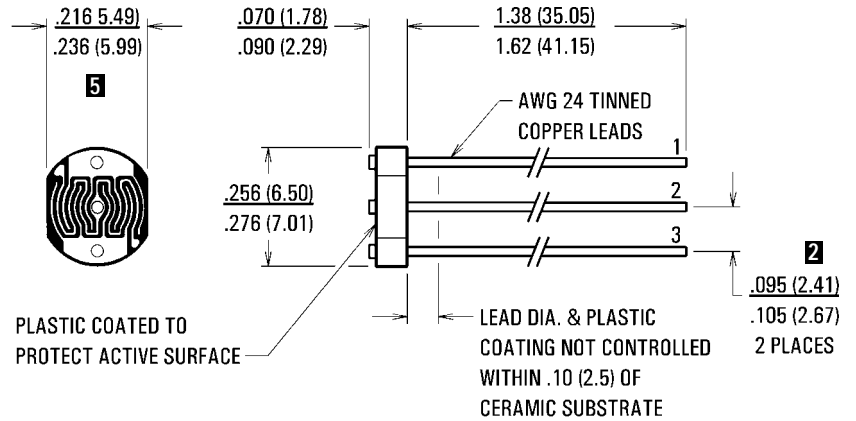
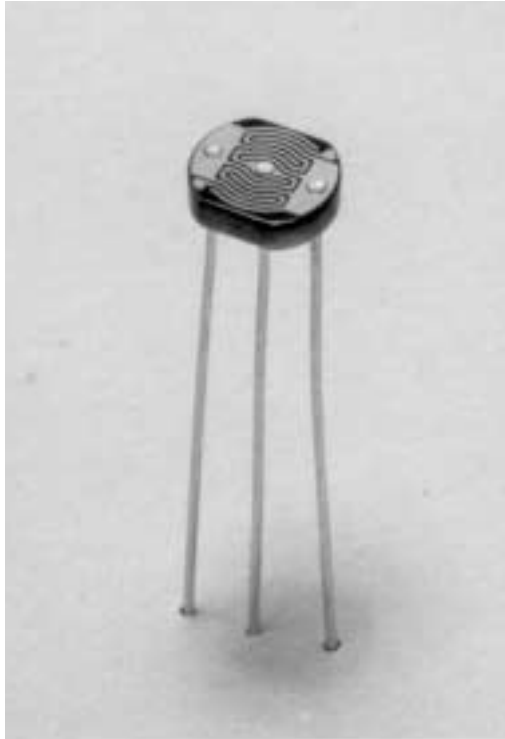
Parameter	Symbol	Rating	Units
Continuous Power Dissipation Derate Above 25°C	P_D $\Delta P_D / \Delta T$	175 3.5	mW mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.) 4

Part Number	Resistance (Ohms) 3 6						Material Type	Sensitivity (γ , typ.) $\frac{OG(R_{10}/R_{100})}{LOG(100/10)}$	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)	
	10 lux 2850 K			2 fc 2850 K	Dark					Rise (1-1/e)	Fall (1/e)
	Min.	Typ.	Max.	Typ.	Min.	sec.					
VT80N1	4 k	8 k	12 k	4 k	100 k	5	Ø	0.80	100	78	8
VT80N2	8 k	16 k	24 k	8 k	500 k	5	Ø	0.80	200	78	8
VT83N1	6 k	12 k	18 k	6 k	100 k	5	3	0.95	100	35	5
VT83N2	12 k	28 k	36 k	14 k	500 k	5	3	0.95	200	35	5
VT83N3	24 k	48 k	72 k	24 k	1 M	5	3	0.95	200	35	5
VT83N4	50 k	100 k	150 k	50 k	2 M	5	3	0.95	200	35	5

See page 13 for notes.

PACKAGE DIMENSIONS inch (mm)



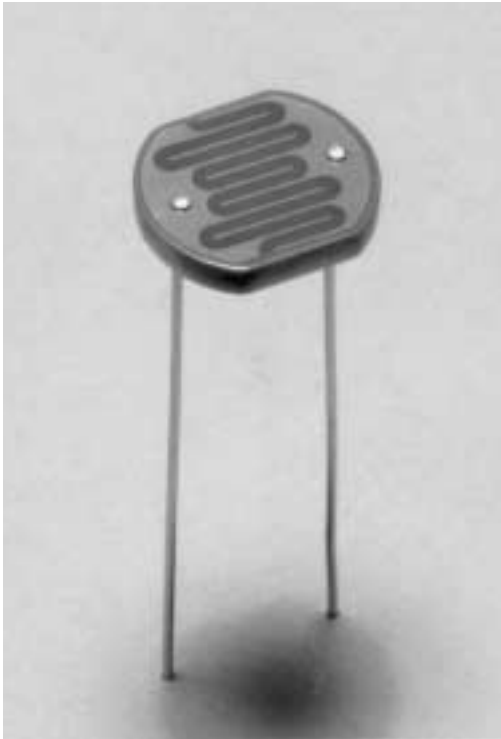
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Units
Continuous Power Dissipation (Per Element) Derate Above 25°C	P_D $\Delta P_D / \Delta T$	80 1.6	mW mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

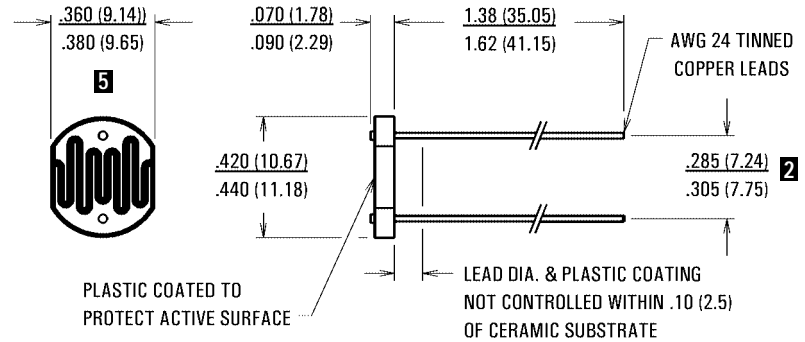
ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.) 4

Part Number	Resistance Per Element (Ohms) 3 6						Matching @ 10 Lux R_{1-2} / R_{2-3}	Material Type	Sensitivity (γ , typ.) $\frac{OG (R_{10}/R_{100})}{LOG (100/10)}$	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)	
	10 lux 2850 K			2 fc 2850 K	Dark						Rise (1-1/e)	Fall (1/e)
	Min.	Typ.	Max.	Typ.	Min.	sec.						
VT83CT	30 k	60 k	90 k	30 k	1 M	5	0.70 - 1.30	3	0.90	100	35	5

See page 13 for notes.



PACKAGE DIMENSIONS inch (mm)



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Units
Continuous Power Dissipation	P_D	400	mW
Demand (20 minutes)		600	mW
Derate Above 25°C	$\Delta P_D / \Delta T$	8.0	mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

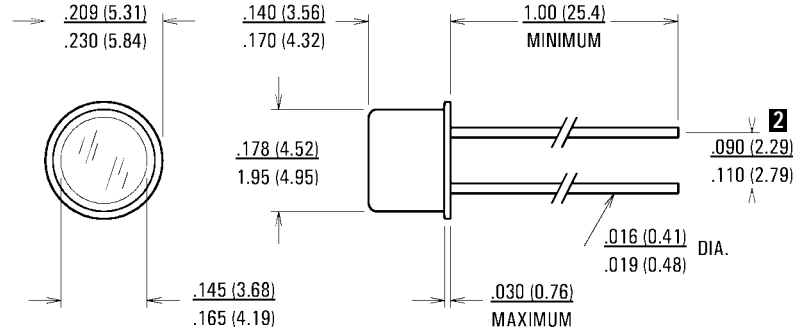
ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.) 4

Part Number	Resistance (Ohms) 3 6						Material Type	Sensitivity (γ , typ.) <small>$\frac{OG(R_{10}/R_{100})}{LOG(100/10)}$</small>	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)	
	1 fc 6500 K			2 fc 2850 K	Dark					Rise (1-1/e)	Fall (1/e)
	Min.	Typ.	Max.	Typ.	Min.	sec.					
VT43N1	4 k	8 k	12 k	—	300 k	30	3	0.90	250	90	18
VT43N2	8 k	16 k	24 k	—	300 k	30	3	0.90	250	90	18
VT43N3	16 k	32 k	48 k	—	500 k	30	3	0.90	400	90	18
VT43N4	33 k	66 k	100 k	—	500 k	30	3	0.90	400	90	18

See page 13 for notes.



PACKAGE DIMENSIONS inch (mm)



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Units
Continuous Power Dissipation Derate Above 25°C	P_D $\Delta P_D / \Delta T$	50 1.0	mW mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

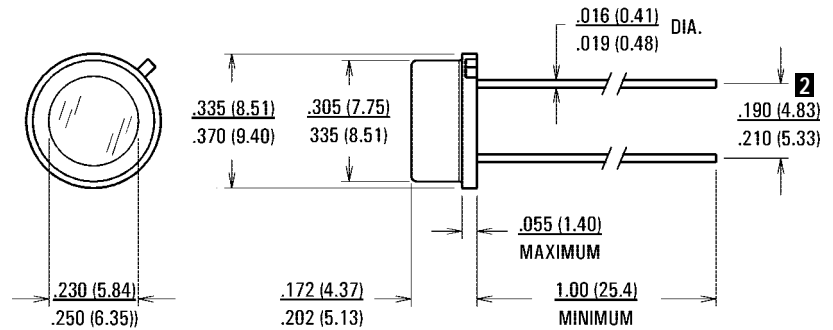
ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.)

Part Number	Resistance (Ohms) ³ ⁶						Material Type	Sensitivity (γ , typ.) $\frac{\text{LOG}(R_{10}/R_{100})}{\text{LOG}(100/10)}$	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)	
	10 lux 2850 K			2 fc 2850 K	Dark					Rise (1-1/e)	Fall (1/e)
	Min.	Typ.	Max.	Typ.	Min.	sec.					
VT2ØN1	8 k	16 k	24 k	8 k	200 k	5	Ø	0.80	100	78	8
VT2ØN2	16 k	34 k	52 k	17 k	500 k	5	Ø	0.80	100	78	8
VT2ØN3	36 k	72 k	108 k	36 k	1 M	5	Ø	0.80	100	78	8
VT2ØN4	76 k	152 k	230 k	76 k	2 M	5	Ø	0.80	200	78	8
VT23N1	20 k	40 k	60 k	20 k	500 k	5	3	0.85	100	35	5
VT23N2	42 k	86 k	130 k	43 k	1 M	5	3	0.85	100	35	5
VT23N3	90 k	180 k	270 k	90 k	2 M	5	3	0.85	100	35	5

See page 13 for notes.



PACKAGE DIMENSIONS inch (mm)



ABSOLUTE MAXIMUM RATINGS

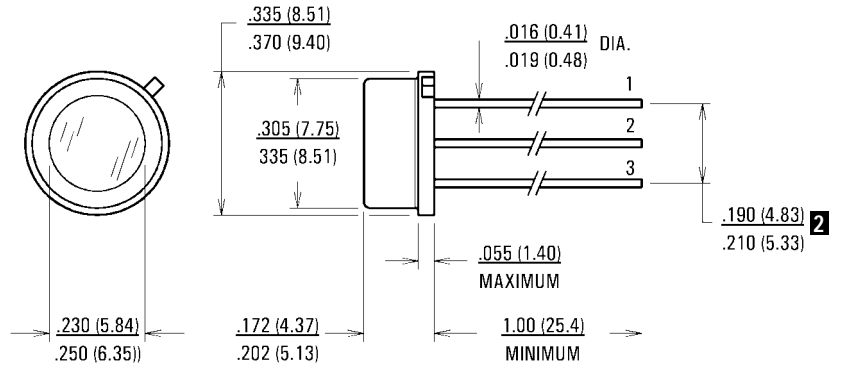
Parameter	Symbol	Rating	Units
Continuous Power Dissipation Derate Above 25°C	P_D $\Delta P_D / \Delta T$	125 2.5	mW mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.) 4

Part Number	Resistance (Ohms) 3 6						Material Type	Sensitivity (γ , typ.) <small>$\frac{OG (R10/R100)}{LOG (100/I0)}$</small>	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)	
	10 lux 2850 K			2 fc 2850 K	Dark					Rise (1-1/e)	Fall (1/e)
	Min.	Typ.	Max.	Typ.	Min.	sec.					
VT3ØN1	6 k	12 k	18 k	6 k	200 k	5	Ø	0.75	100	78	8
VT3ØN2	12 k	24 k	36 k	12 k	500 k	5	Ø	0.80	200	78	8
VT3ØN3	24 k	48 k	72 k	24 k	1 M	5	Ø	0.80	200	78	8
VT3ØN4	50 k	100 k	150 k	50 k	2 M	5	Ø	0.80	300	78	8
VT33N1	20 k	40 k	60 k	20 k	500 k	5	3	0.90	100	35	5
VT33N2	40 k	80 k	120 k	40 k	1 M	5	3	0.90	200	35	5
VT33N3	80 k	160 k	240 k	80 k	2 M	5	3	0.90	200	35	5

See page 13 for notes.

PACKAGE DIMENSIONS inch (mm)



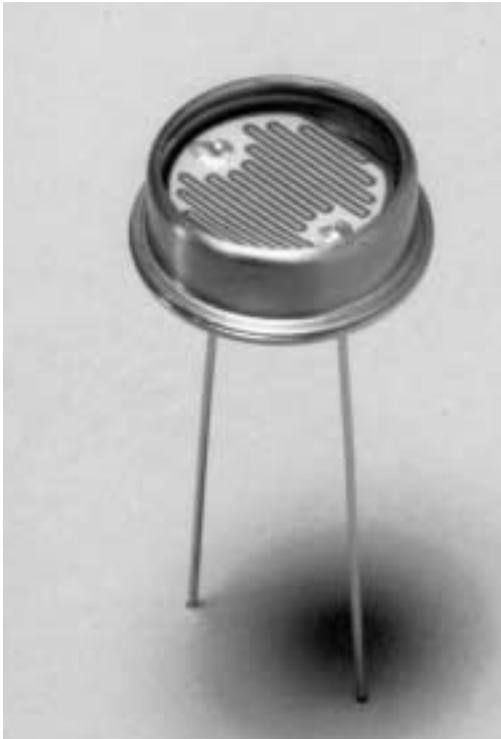
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Units
Continuous Power Dissipation (Per Element) Derate Above 25°C	P_D $\Delta P_D / \Delta T$	50 1.0	mW mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

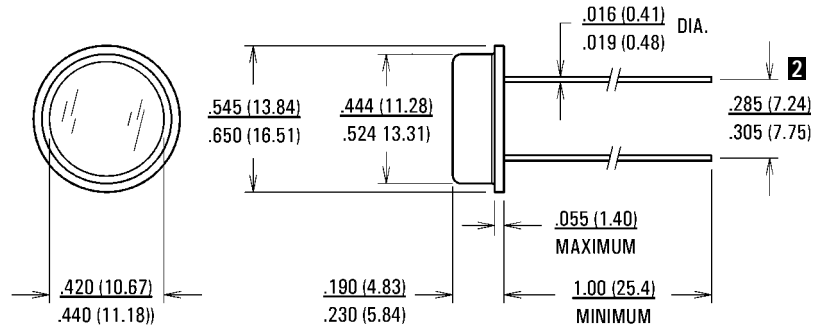
ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.) 4

Part Number	Resistance Per Element (Ohms) 3 6						Matching 10 Lux R_{1-2} / R_{2-3}	Material Type	Sensitivity (γ , typ.) $\frac{OG (R_{10}/R_{100})}{LOG (100/10)}$	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)	
	10 lux 2850 K			2 fc 2850 K	Dark						Rise (1-1/e)	Fall (1/e)
	Min.	Typ.	Max.	Typ.	Min.	sec.						
VT30CT	10 k	20 k	30 k	10 k	500 k	5	0.70 – 1.30	Ø	0.80	200	78	8
VT33CT	60 k	120 k	180 k	60 k	1 M	5	0.70 – 1.30	3	0.90	200	35	5

See page 13 for notes.



PACKAGE DIMENSIONS inch (mm)



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Units
Continuous Power Dissipation Derate Above 25°C	P_D $\Delta P_D / \Delta T$	500 10	mW mW/°C
Temperature Range Operating and Storage	T_A	-40 to +75	°C

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (16 hrs. light adapt, min.) 4

Part Number	Resistance (Ohms) 3 6						Material Type	Sensitivity (γ , typ.) <small>OG (R10/R100) LOG (100/10)</small>	Maximum Voltage (V, pk)	Response Time @ 1 fc (ms, typ.)	
	10 lux 2850 K			2 fc 2850 K	Dark					Rise (1-1/e)	Fall (1/e)
	Min.	Typ.	Max.	Typ.	Min.	sec.					
VT50N1	4 k	8 k	12 k	4 k	200 k	5	Ø	0.75	200	78	8
VT50N2	8 k	16 k	24 k	8 k	500 k	5	Ø	0.75	200	78	8
VT50N3	16 k	32 k	48 k	16 k	1 M	5	Ø	0.80	300	78	8
VT53N1	16 k	32 k	48 k	16 k	1 M	5	3	0.85	200	35	5
VT53N2	32 k	76 k	96 k	38 k	2 M	5	3	0.85	200	35	5
VT53N3	66 k	132 k	200 k	66 k	3 M	5	3	0.85	300	35	5

See page 13 for notes.