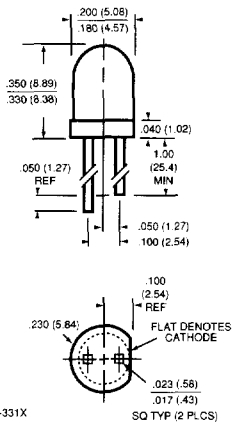
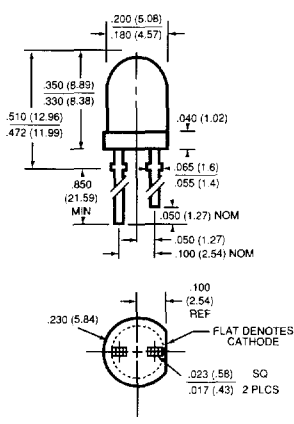


T-1 3/4 Clear Lens									
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage VF(V)		Luminous Intensity IV(mcd)		Notes
					typ	max	min	typ	
MV5052		660	Red Clear	72°	1.6	2.0	0.7	1.0	4
HLMP-3315		635	Red Clear	35°	2.2	3.0	12	18	3
HLMP-3316		635	Red Clear	35°	2.2	3.0	20	35	3
MV3750		635	Orange Clear	24°	2.2	3.0	80	150	4
MV5152		635	Amber Clear	28°	2.0	3.0	17	100	4
MV5752		635	Red Clear	28°	2.0	3.0	17	100	4
MV6152		635	Amber Clear	28°	2.0	3.0	17	100	4
MV6752		635	Red Clear	28°	2.0	3.0	17	100	4
MV3450		565	Green Clear	24°	2.2	3.0	80	150	4
MV5452		565	Green Clear	35°	2.2	3.0	12	25	4
MV64520		565	Green Clear	35°	2.2	3.0	12	25	4
MV64521		565	Green Clear	35°	2.2	3.0	30	100	4
MV3350		585	Yellow Clear	24°	2.2	3.0	80	150	4
MV5352	Yellow	585	Yellow Clear	28°	2.1	3.0	10	90	4
MV6352		585	Yellow Clear	28°	2.1	3.0	10	90	4
HLMP-D640		560	Water Clear	24°	2.2	3.0	6.7	60	4

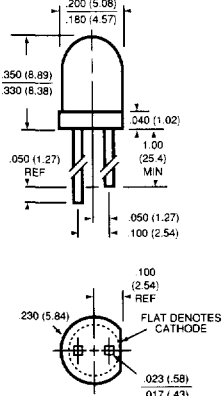


Pkg shown:
 MV5X53/HLMP-331X
 HLMP-D640/MV3X50
 Anode Long
 Not Shown
 MV5X52
 Cathode long

T-1 3/4 Clear Lens with Standoff									
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage VF(V)		Luminous Intensity IV(mcd)		Notes
					typ	max	min	typ	
HLMP-3750A		635	Orange Clear	24°	2.2	3.0	80	150	4
HLMP-3950A		565	Green Clear	24°	2.2	3.0	80	150	4
HLMP-3850A	Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4
HLMP-D105A		660	Red Clear	24°	1.6	2.2	100	240	4

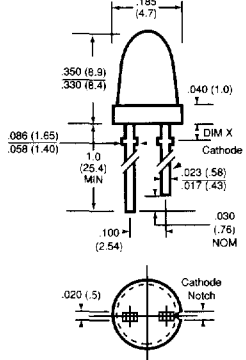


T-1 3/4 Narrow Angle Diffused Lens										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage V_F (V)		Luminous Intensity I_V (mcd)		Notes	
					typ	max	min	typ		
MV5054A1	Red	660	Red Diffused	24°	1.8	2.2	1.0	1.5	3	
MV5054A2		660	Red Diffused	24°	1.8	2.2	2.0	2.5	3	
MV5054A3		660	Red Diffused	24°	1.8	2.2	3.0	3.5	3	
MV5154A	Amber	635	Amber Diffused	24°	2.0	2.8	10.0	25.0	4	
MV5754A		635	Red Diffused	24°	2.0	3.0	10.0	25.0	4	
MV6154A	Red	635	Amber Diffused	24°	2.0	3.0	10.0	25.0	4	
MV6754A		635	Red Diffused	24°	2.0	3.0	10.0	25.0	4	
MV5454A	Green	565	Green Diffused	24°	2.2	3.0	10.0	30.0	4	
MV6454A		565	Green Diffused	24°	2.2	3.0	10.0	30.0	4	
MV5354A	Yellow	585	Yellow Diffused	24°	2.1	3.0	10.0	25.0	4	
MV6354A		585	Yellow Diffused	24°	2.1	3.0	10.0	25.0	4	



Pkg shown:
MV6X54 Anode Long
Not Shown:
MV5X54 Cathode long

T-1 3/4 Tapered Lamps										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage V_F (V)		Luminous Intensity I_V (mcd)		Notes	
					typ	max	min	typ		
MV5021A	White	660	White Diffused	80°	1.65	2.0	0.5	1.6	4	
MV5022A		660	Red Clear	80°	1.65	2.0	0.6	1.6	4	
MV5023A		660	Red Diffused	80°	1.65	2.0	0.4	1.6	4	
MV5024A		660	Red Diffused	40°	1.65	2.0	0.9	3.0	4	
MV5025A		660	Red Diffused	180°	1.65	2.0	0.1	0.4	4	
MV5026A		660	Deep Red Diffused	80°	1.65	2.0	0.1	0.6	4	

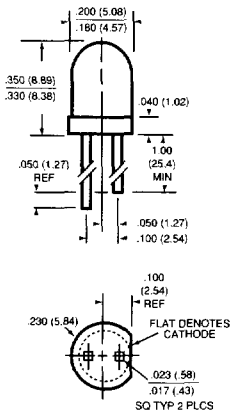


Part Number DIM X
MAX MIN
MV5021A/22A/23A .115 (2.9) .085 (2.2)
MV5024A/25A/26A .145 (3.7) .115 (2.9)

Notes:

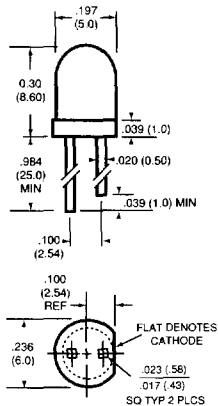
- 3. V_F & I_V @ $I_F = 10$ mA.
- 4. V_F & I_V @ $I_F = 20$ mA.
- HER = High Efficiency Red.

T-1 3/4 Wide Angle Diffused Lens										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage $V_f(V)$		Luminous Intensity $I_v(mcd)$		Notes	
					typ	max	min	typ		
MV5053		660	Red Diffused	70°	1.7	2.2	0.5	1.6	4	
MV6053		660	Red Diffused	70°	1.7	2.2	0.5	1.6	4	
MV5055		660	Red Diffused	150°	1.7	2.2	0.1	0.3	4	
HLMP-3300		635	Red Diffused	65°	2.2	3.0	2.0	3.5	3	
HLMP-3301		635	Red Diffused	65°	2.2	3.0	4.0	7.0	3	
MV5153		635	Amber Diffused	65°	2.0	3.0	3.0	15.0	4	
MV5753		635	Red Diffused	65°	2.0	3.0	3.0	15.0	4	
MV6153		635	Amber Diffused	65°	2.0	3.0	3.0	15.0	4	
MV6753		635	Red Diffused	65°	2.0	3.0	3.0	15.0	4	
MV5453		565	Green Diffused	65°	2.2	3.0	3.0	20.0	4	
MV64530		565	Green Diffused	65°	2.2	3.0	3.0	20.0	4	
MV64531		565	Green Diffused	65°	2.2	3.0	7.0	20.0	4	
MV5353	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	15.0	4	
MV6353	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	15.0	4	
HLMP-D101A		660	Red Diffused	65°	1.8	2.2	35.0	70.0	4	
HLMP-D600		560	Green Diffused	60°	2.1	2.7	1.0	3.0	3	
HLMP-D400		612	Orange Diffused	60°	1.9	2.4	2.1	3.5	3	
HLMP-D401		612	Orange Diffused	60°	1.9	2.3	4.0	7.0	3	

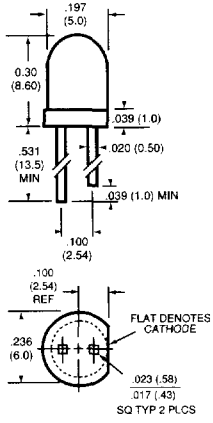


Pkg Shown:
 MV6X53/HLMP-33XX
 HLMP-D101A Anode long
 Not Shown:
 MV5X53 Cathode long

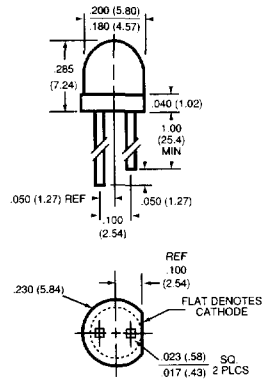
T-1 3/4 industrial Standard Lamp - Long Leads										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage $V_f(V)$		Luminous Intensity $I_v(mcd)$		Notes	
					typ	max	min	typ		
QL332GD		565	Green Diffused	45°	2.1	2.8	2.0	10.0	3	
QL332HD		697	Red Diffused	45°	2.1	2.8	2.1	2.0	3	
QL332ID		635	Red Diffused	45°	2.0	2.8	2.5	10.0	3	
QL332YD	Yellow	585	Yellow Diffused	45°	2.0	2.8	2.0	10.0	3	
QL332GC		565	Green Clear	20°	2.1	2.8	1.5	8.0	3	
QL332HC		697	Red Clear	20°	2.1	2.8	2.5	10.0	3	
QL332IC		635	Red Clear	20°	2.0	2.8	10.0	30.0	3	
QL332YC	Yellow	585	Yellow Clear	20°	2.0	2.8	25.0	40.0	3	



T-1 3/4 industrial Standard Lamp - Short Leads										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage V_F (V)		Luminous Intensity I_V (mcd)		Notes	
					typ	max	min	typ		
QL335GD		565	Green Diffused	45°	2.1	2.8	2.0	10.0	3	
QL335HD		697	Red Diffused	45°	2.1	2.8	1.0	2.0	3	
QL335ID		635	Red Diffused	45°	2.0	2.8	2.5	10.0	3	
QL335YD	Yellow	585	Yellow Diffused	45°	2.0	2.8	2.0	10.0	3	
QL335GC		565	Green Clear	20°	2.1	2.8	1.5	8.0	3	
QL335HC		697	Red Clear	20°	2.1	2.8	2.5	10.0	3	
QL335IC		635	Red Clear	20°	2.0	2.8	10.5	30.0	3	
QL335YC	Yellow	585	Yellow Clear	20°	2.0	2.8	25.5	40.0	3	



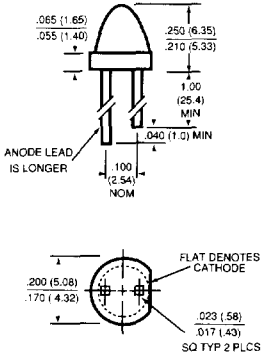
T-1 3/4 Low Profile Lens										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage V_F (V)		Luminous Intensity I_V (mcd)		Notes	
					typ	max	min	typ		
FLV110		660	Red Diffused	60°	1.6	2.0	0.8	3.0	3	



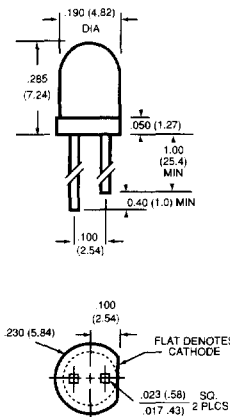
Notes:

- 3. V_F & I_V @ $I_F = 10$ mA.
 - 4. V_F & I_V @ $I_F = 20$ mA.
- HER = High Efficiency Red.

T-1 3/4 Bullet Lens										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage V_F (V)		Luminous Intensity I_V (mcd)		Notes	
					typ	max	min	typ		
MV50152	[Redacted]	660	Red Clear	45°	1.6	2.0	0.6	2.0	3	
MV50154		660	Red Diffused	50°	1.6	2.0	0.4	1.5	3	
MV57152		635	Orange Clear	45°	2.0	3.0	4.0	10.0	3	
MV57154		635	Orange Diffused	50°	2.0	3.0	2.0	8.0	3	
MV54152		[Redacted]	565	Green Clear	45°	2.2	3.0	2.5	15.0	3
MV54154			565	Green Diffused	50°	2.2	3.0	2.0	12.0	3
MV53152		Yellow	585	Amber Clear	45°	2.1	3.0	3.0	10.0	3
MV53154			585	Amber Diffused	50°	2.1	3.0	1.5	8.0	3



T-1 3/4 Maximum Contrast										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	Forward Voltage V_F (V)		Luminous Intensity I_V (mcd)		Notes	
					typ	max	min	typ		
MV6151	[Redacted]	635	Pale Orange Diffused	70°	2.1	3.0	3.0	12.0	4	
MV6951		660	Pale Pink Diffused	70°	1.8	3.0	3.0	12.0	4	
MV6451		565	Pale Green Diffused	70°	2.3	3.0	3.0	12.0	4	
MV6351		Yellow	585	Pale Yellow Diffused	70°	2.2	3.0	3.0	12.0	4



Notes:

1. V_F & I_V @ $I_F = 1$ mA.
 2. V_F & I_V @ $I_F = 2$ mA.
 3. V_F & I_V @ $I_F = 10$ mA.
 4. V_F & I_V @ $I_F = 20$ mA.
- HER = High Efficiency Red.