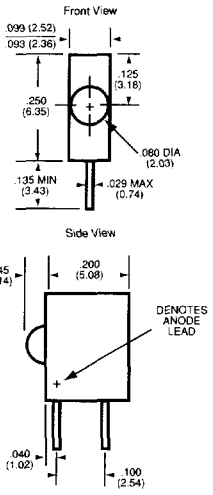
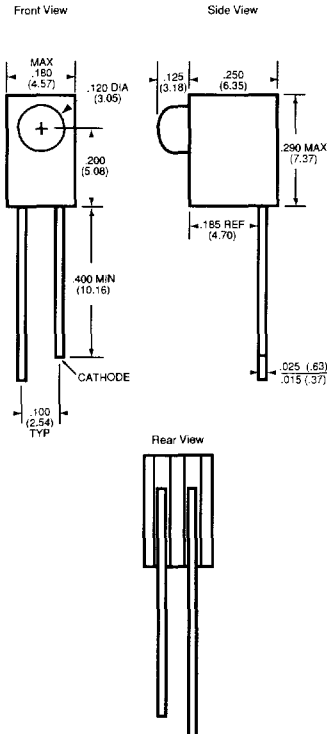


PCB AND PANEL MOUNT LED INDICATORS

T-3/4 (Subminiature) - Short Package									
Part Number	Source Color	Typical Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts		Luminous Intensity I_V (mcd)		Notes
					typ	max	min	typ	
MV5000.MP2		660	Red Diffused	40°	1.7	2.0	1.0	3.0	4
MV5300.MP2	Yellow	585	Yellow Diffused	40°	2.1	3.0	0.2	0.5	4
MV5400.MP2		565	Green Diffused	40°	2.3	3.0	0.8	0.7	4
MR5000.MP2		660	Red Diffused	40°	3.8	4.0	0.8	0.6	8
MR5010.MP2		660	Red Diffused	40°	6.8	8.0	0.6	1.2	8
MR5020.MP2		660	Red Diffused	40°	16.0	21.0	1.0	2.0	8
MR5310.MP2	Yellow	585	Yellow Diffused	40°	5.0	0.3	0.3	0.6	8
MR5410.MP2		565	Green Diffused	40°	5.0	0.3	0.3	0.5	8



T-100 (3 mm)									
Part Number	Source Color	Typical Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts		Luminous Intensity I_V (mcd)		Notes
					typ	max	min	typ	
MV5064.MP4A		660	Red Diffused	60°	1.6	2.2	0.5	1.5	4
MV5364.MP4A	Yellow	585	Yellow Diffused	60°	2.1	3.0	1.0	2.0	3
MV5464.MP4A		565	Green Diffused	60°	2.2	3.0	10	15	4
MV5764.MP4A		635	Red Diffused	60°	2.0	3.0	1.0	2.0	3
HLMP-1700.MP4A		635	Red Diffused	50°	1.8	2.2	1.0	2.0	2
HLMP-1719.MP4A	Yellow	585	Yellow Diffused	50°	1.9	2.7	1.0	2.0	2
HLMP-1790.MP4A		565	Green Diffused	50°	13	2.7	1.0	2.0	2
HLMP-K101.MP4A		660	Red Diffused	60°	1.8	2.2	22	45	4
HLMP-K105.MP4A			Red Clear	35°	1.8	2.2	35	70	4
HLMP-K150.MP4A			Red Diffused	60°	1.6	1.8	1.2	2.0	1
HLMP-K155.MP4A			Red Clear	45°	1.6	1.8	2.0	3.0	1
MR5060.MP4A		660	Red Diffused	60°	13	20	0.8	1.5	8
MR5360.MP4A	Yellow	585	Yellow Diffused	60°	10	15	1.5	4.0	8
MR5460.MP4A		565	Green Diffused	60°	12	15	1.5	4.0	8
MR5760.MP4A		635	Red Diffused	60°	10	15	1.5	4.0	8



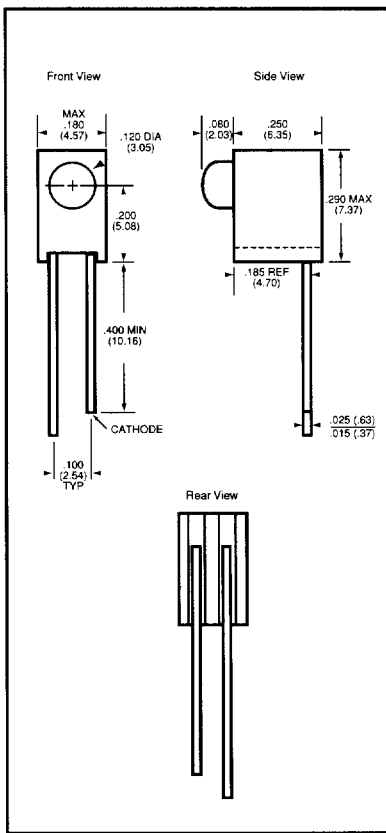
General Notes for all PCB Mount LED Indicators

All dimensions are in inches (mm)
Tolerance is $\pm .015$ ($\pm .38$) unless otherwise specified.

Notes:

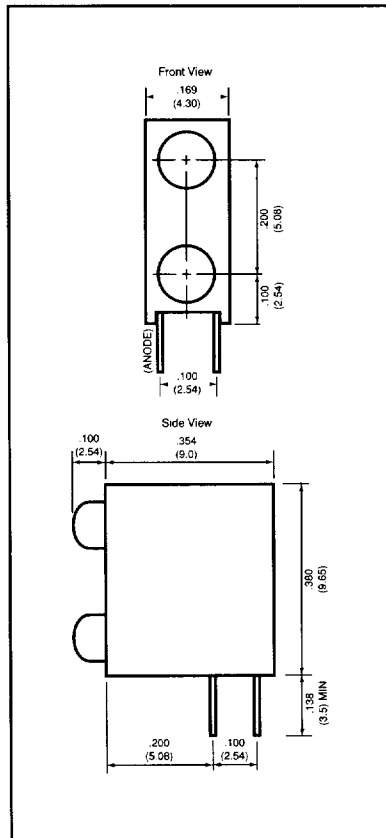
1. V_F & I_V @ $I_F = 1$ mA.
2. V_F & I_V @ $I_F = 2$ mA.
3. V_F & I_V @ $I_F = 10$ mA.
4. V_F & I_V @ $I_F = 20$ mA.
5. V_F & I_V @ $I_F = 5$ mA.
6. V_F & I_V @ $I_F = 10$ mA.
7. V_F & I_V @ $I_F = 20$ mA.
8. I_F & I_V @ $V_F = 5$ V
HER = High Efficiency Red.
B. Red = Bright Red.

Custom color combinations are available.



T-100 (3mm)

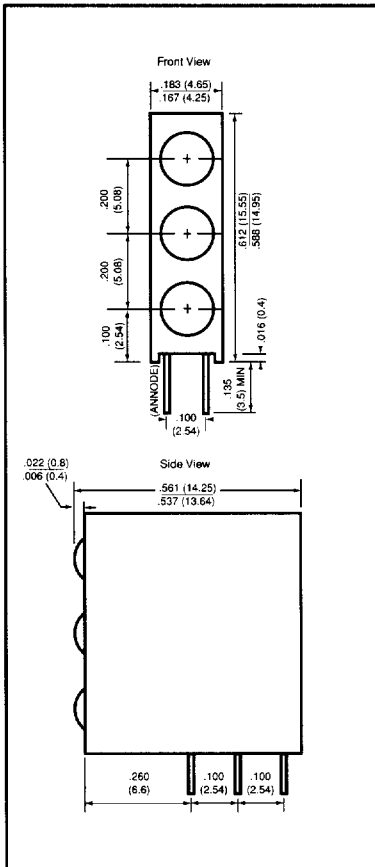
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts V_F (V)		Luminous Intensity I_V (mcd)		Notes
					typ	max	min	typ	
MV5064.MP4B		660	Red Diffused	60°	1.6	2.2	0.5	1.5	4
MV5364.MP4B	Yellow	585	Yellow Diffused	60°	2.1	3.0	1.0	2.0	3
MV5464.MP4B		565	Green Diffused	60°	2.2	3.0	10	15	4
MV5764.MP4B		635	Red Diffused	60°	2.0	3.0	1.0	2.0	3
HLMP-1700.MP4B				50°	1.8	2.2	1.0	2.0	2
HLMP-1719.MP4B	Yellow	585	Yellow Diffused	50°	1.9	2.7	1.0	2.0	2
HLMP-1790.MP4B		565	Green Diffused	50°	1.9	2.7	1.0	2.0	2
HLMP-K101.MP4B		660	Red Diffused	60°	1.8	2.2	22	45	4
HLMP-K105.MP4B			Red Clear	35°	1.8	2.2	35	70	4
HLMP-K150.MP4B			Red Diffused	60°	1.6	1.8	1.2	2.0	1
HLMP-K155.MP4B			Red Clear	45°	1.6	1.8	2.0	3.0	1
MR5060.MP4B		660	Red Diffused	60°	13	20	0.8	1.5	8
MR5360.MP4B	Yellow	585	Yellow Diffused	60°	10	15	1.5	4.0	8
MR5460.MP4B		565	Green Diffused	60°	13	15	1.5	4.0	8
MR5760.MP4B		635	Red Diffused	60°	13	15	1.5	4.0	8



T-100 (3 mm) Bilevel Right Angle

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	
QLA694B-2H		697	Red Diffused	140°	2.1	2.8	0.9	1.4	3
QLA694B-2I		635	Red Diffused	140°	2.0	2.8	4.0	6.0	3
QLA694B-2G		565	Green Diffused	140°	2.1	2.8	4.0	6.0	3
QLA694B-2Y	Yellow	585	Yellow Diffused	140°	2.0	2.8	4.0	6.0	3
	Yellow								
QLA694B-HG		697	Diffused	140°	2.1	2.8	0.9	1.4	3
		565							
QLA694B-GY		565	Diffused	140°	2.1	2.8	4.0	6.0	3
	Yellow	585							

T-100 (3 mm) Trilevel Right Angle									
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	
QLA764B-3H		697	Red Diffused	140°	2.1	2.8	0.9	1.4	3
QLA764B-3I		635	Red Diffused	140°	2.0	2.8	4.0	6.0	3
QLA764B-3G		565	Green Diffused	140°	2.1	2.8	4.0	6.0	3
QLA764B-3Y	Yellow	585	Yellow Diffused	140°	2.0	2.8	4.0	6.0	3
QLA764B-HGY		697	Diffused	140°	2.1	2.8	0.9	1.4	3
		565							
	Yellow	585							
QLA764B-YGH	Yellow	585	Diffused	140°	2.1	2.8	4.0	6.0	3
		697							



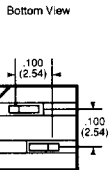
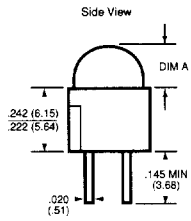
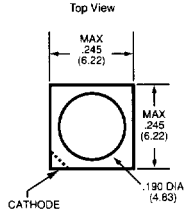
Notes:

- 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
- 8. I_F & I_V @ $V_F = 5$ V

- 9. I_F & I_V @ $V_F = 12$ V
- 11. Dim A = 0.125 (3.18)
- 12. Dim A = 0.180 (4.57)
- 13. Bicolor
- 14. The cathode is the AlGaAs Red cathode for red / green bicolor LED

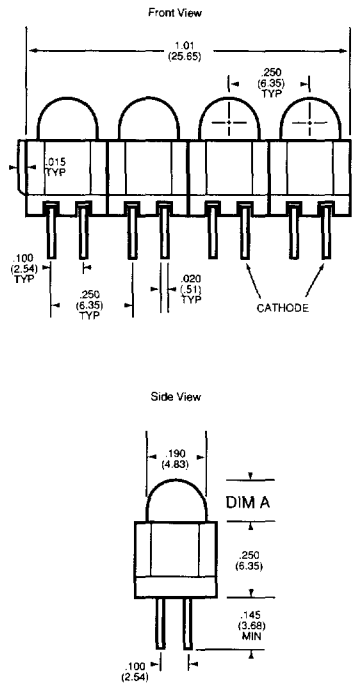
- 15. Integral Resistor
 HER = High Efficiency Red
 B.Red = Bright Red

T-1 3/4 (5mm)



Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts		Luminous Intensity I_V (mcd)		Notes
					V_F (V) typ	max	min	typ	
MV60538.MP5		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 11
MV63538.MP5	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 11
MV64538.MP5		565	Green Diffused	65°	2.2	3.0	1.6	25	4, 11
MV67538.MP5		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 11
MV60539.MP5		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 12
MV63539.MP5	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 12
MV64539.MP5		565	Green Diffused	65°	2.2	3.0	1.6	25	4, 12
MV67539.MP5		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 12
HLMP-47009.MP5		635	Red Diffused	45°	1.8	2.2	1.2	2.0	2, 12
HLMP-47199.MP5	Yellow	585	Yellow Diffused	45°	1.9	2.7	1.2	10	2, 12
HLMP-47409.MP5		565	Green Diffused	45°	1.9	2.3	1.2	2.0	2, 12
HLMP-D1019.MP5		660	Red Diffused	65°	1.8	2.2	35	70.0	4, 12
HLMP-D1509.MP5			Red Clear	24°	1.6	1.8	1.2	3.0	1, 12
MV33509.MP5	Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4, 12
MV34509.MP5		565	Green Clear	24°	2.2	3.0	80	150	4, 12
MV37509.MP5		635	Orange Clear	24°	2.2	3.0	80	150	4, 12
MR30509.MP5		660	Red Diffused	60°	13	2.0	1.0	2.0	8,12,15
MR30519.MP5				60°	13	2.0	1.0	2.0	9,12,15
MR33509.MP5	Yellow	585	Yellow Diffused	60°	10	15	1.5	4.0	8,12,15
MR33519.MP5				60°	13	20	1.5	4.0	9,12,15
MR34509.MP5		565	Green Diffused	60°	12	15	1.5	4.0	8,12,15
MR34519.MP5				60°	12	20	1.5	4.0	9,12,15
MR37509.MP5		635	Red Diffused	60°	10	15	1.5	4.0	8,12,15
MR37519.MP5				60°	13	20	1.5	4.0	9,12,15
MV54919.MP5		660	White Diffused	100°	2.1	3.0	2.0	6.0	4,12,13,14
		565							

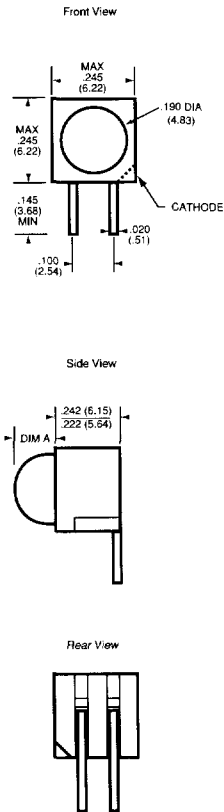
T-1 3/4 (5mm) Multiple									
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts V_F (V)		Luminous Intensity I_V (mcd)		Notes
					typ	max	min	typ	
MV60538.MP8		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 17
MV63538.MP8	Yellow	585	Yellow Diffused	65°	2.1	3.0	3.5	18	4, 17
MV64538.MP8		565	Green Diffused	65°	2.2	3.0	1.6	25	4, 17
MV67538.MP8		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 17
MV60539.MP8		660	Red Diffused	65°	1.7	2.0	0.8	2.8	4, 18
MV63539.MP8	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 18
MV64539.MP8		565	Green Diffused	65°	2.2	3.0	1.6	25	4, 18
MV67539.MP8		635	Red Diffused	65°	2.1	3.0	3	14	4, 18
HLMP-47009.MP8		635	Red Diffused	45°	1.8	2.2	1.2	2.0	2, 18
HLMP-47199.MP8	Yellow	585	Yellow Diffused	45°	1.9	2.7	1.2	10	2, 18
HLMP-47409.MP8		565	Green Diffused	45°	1.9	2.3	1.2	2.0	2, 18
MV33509.MP8	Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4, 18
MV34509.MP8		565	Green Clear	24°	2.2	3.0	80	150	4, 18
MV37509.MP8		635	Orange Clear	24°	2.2	3.0	80	150	4, 18
MR30509.MP8		660	Red Diffused	60°	12	20	1.0	2.0	8,15,18
MR30519.MP8		660	Red Diffused	60°	12	20	1.0	2.0	9,15,18
MR33509.MP8		660	Red Diffused	60°	10	15	1.5	4.0	8,15,18
MR33519.MP8	Yellow	585	Yellow Diffused	60°	13	20	1.5	4.0	9,15,18
MR34509.MP8		565	Green Diffused	60°	12	15	1.5	4.0	8,15,18
MR34519.MP8		565	Green Diffused	60°	13	20	1.5	4.0	9,15,18
MR37509.MP8		635	Red Diffused	60°	10	15	1.5	4.0	8,15,18
MR37519.MP8		635	Red Diffused	60°	13	20	1.5	4.0	9,15,18
MV54919.MP8		660 / 565	White Diffused	100°	2.1	3.0	2.0	6.0	4,13,14,18



Notes:

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> 1. V_F & I_V @ $I_F = 1$ mA 2. V_F & I_V @ $I_F = 2$ mA 4. V_F & I_V @ $I_F = 20$ mA 8. I_F & I_V @ $V_F = 5$ V 9. I_F & I_V @ $V_F = 12$ V | <ul style="list-style-type: none"> 11. Dim A = 0.125 (3.18) 12. Dim A = 0.180 (4.57) 13. Bicolor 14. The cathode is the AlGaAs Red cathode for red / green bicolor LED | <ul style="list-style-type: none"> 15. Integral Resistor 17. Dim A = 0.140 (3.56) 18. Dim A = 0.195 (4.95). HER = High Efficiency Red B.Red = Bright Red |
|--|--|---|

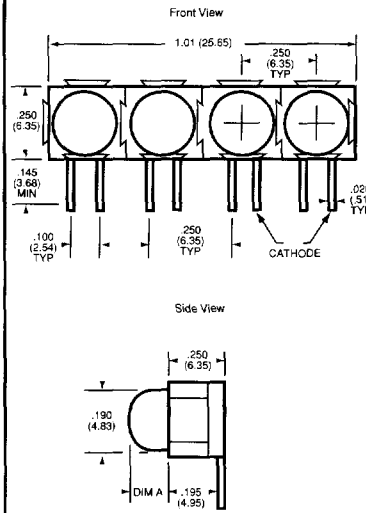
T-1 3/4 (5mm)



Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts		Luminous Intensity I_V (mcd)		Notes
					V_F (V) typ	max	min	typ	
MV60538-MP6		660	Red Diffused	55°	1.7	2.0	0.8	2.0	4, 11
MV63538-MP6	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 11
MV64538-MP6		565	Green Diffused	65°	2.2	3.0	1.6	25	4, 11
MV67538-MP6		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 11
MV60539-MP6		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 12
MV63539-MP6	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 12
MV64539-MP6		565	Green Diffused	65°	2.2	3.0	1.8	25	4, 12
MV67539-MP6		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 12
HLMP-47009.MP6		635	Red Diffused	45°	1.8	2.2	1.2	2.0	2, 12
HLMP-47199.MP6	Yellow	585	Yellow Diffused	45°	1.9	2.7	1.2	10	2, 12
HLMP-47409.MP6		565	Green Diffused	45°	1.9	2.3	1.2	3.0	2, 12
HLMP-D1019.MP6		660	Red Diffused	65°	1.8	2.2	35	70	4, 12
HLMP-D1509.MP6			Red Clear	24°	1.6	1.8	1.8	3.0	1, 12
MV33509.MP6	Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4, 12
MV34509.MP6		565	Green Clear	24°	2.2	3.0	80	150	4, 12
MV37509.MP6		635	Orange Clear	24°	2.2	3.0	80	150	4, 12
MR30509.MP6		660	Red Diffused	60°	12	20	1.0	2.0	8,12,15
MR30519.MP6				60°	13	20	1.0	2.0	9,12,15
MR33509.MP6	Yellow	585	Yellow Diffused	60°	10	15	1.5	4.0	8,12,15
MR33519.MP6				60°	13	20	1.5	4.0	9,12,15
MR34509.MP6		565	Green Diffused	60°	12	15	1.5	4.0	8,12,15
MR34519.MP6				60°	13	20	1.5	4.0	9,12,15
MR37509.MP6		635	Red Diffused	60°	10	15	1.5	4.0	8,12,15
MR37519.MP6				60°	13	20	1.5	4.0	9,12,15
MV54919.MP6		660 / 565	White Diffused	100°	2.1	3.0	2.0	6.0	4,12,13,14

PCB AND PANEL MOUNT LED INDICATORS

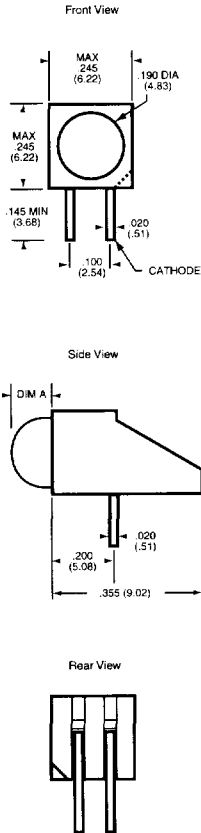
T-1 3/4 (5mm) Multiple									
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts		Luminous Intensity I_V (mcd)		Notes
					V_F (V) typ	V_F (V) max	min	typ	
MV60538.MP8A		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 17
MV63538.MP8A	Yellow	585	Yellow Diffused	65°	2.1	3.0	3.5	18	4, 17
MV64538.MP8A		565	Green Diffused	65°	2.2	3.0	1.6	25	4, 17
MV67538.MP8A		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 17
MV60539.MP8A		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 18
MV63539.MP8A	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 18
MV64539.MP8A		565	Green Diffused	65°	2.2	3.0	16	25	4, 18
MV67539.MP8A		635	Red Diffused	65°	2.1	3.0	3	14	4, 18
HLMP-47009.MP8A		635	Red Diffused	45°	1.8	2.2	1.2	2.0	2, 18
HLMP-47199.MP8A	Yellow	585	Yellow Diffused	45°	1.9	2.7	1.2	10	2, 18
HLMP-47409.MP8A		565	Green Diffused	45°	1.9	2.3	1.2	2.0	2, 18
MV33509.MP8A	Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4, 18
MV34509.MP8A		565	Green Clear	24°	2.2	3.0	80	150	4, 18
MV37509.MP8A		635	Orange Clear	24°	2.2	3.0	80	150	4, 18
MR30509.MP8A		660	Red Diffused	60°	12	20	1.0	2.0	8,15,18
MR30519.MP8A				60°	13	20	1.0	2.0	9,15,18
MR33509.MP8A	Yellow	585	Yellow Diffused	60°	10	15	1.5	4.0	8,15,18
MR33519.MP8A				60°	13	20	1.5	4.0	9,15,18
MR34509.MP8A		565	Green Diffused	60°	12	15	1.5	4.0	8,15,18
MR34519.MP8A				60°	13	20	1.5	4.0	9,15,18
MR37509.MP8A		635	Red Diffused	60°	12	15	1.5	4.0	8,15,18
MR37519.MP8A				60°	13	20	1.5	4.0	9,15,18
MV54919.MP8A		660 565	White Diffused	100°	2.1	3.0	2.0	6.0	4,13,14,18



Notes:

- | | | |
|----------------------------------|-------------------------------------|---------------------------|
| 2. V_F & I_V @ $I_F = 2$ mA | 12. Dim A = 0.180 (4.57) | 16. Dim A = 0.183 (4.65) |
| 4. V_F & I_V @ $I_F = 20$ mA | 13. Bicolor | 17. Dim A = 0.140 (3.56) |
| 8. I_F & I_V @ $V_F = 5$ V | 14. The cathode is the AlGaAs Red | 18. Dim A = 0.195 (4.95) |
| 9. I_F & I_V @ $V_F = 12$ V | cathode for red / green bicolor LED | HER = High Efficiency Red |
| 11. Dim A = 0.125 (3.18) | 15. Integral Resistor | |

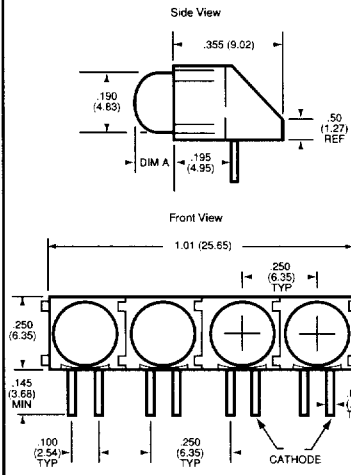
T-1 3/4 (5mm)



Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I_F (mA) for MR Parts		Luminous Intensity I_V (mcd)		Notes
					V_F (V) typ	max	min	typ	
MV60538-MP7		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 11
MV63538-MP7	Yellow	585	Yellow Diffused	65°	2.1	3.0	3.5	18	4, 11
MV64538-MP7		565	Green Diffused	65°	2.2	3.0	1.6	25	4, 11
MV67538-MP7		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 11
MV60539-MP7		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 16
MV63539-MP7	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 16
MV64539-MP7		565	Green Diffused	65°	2.2	3.0	16	25	4, 16
MV67539-MP7		635	Red Diffused	65°	2.1	3.0	3.0	14	4, 16
HLMP-47009.MP7		635	Red Diffused	45°	1.8	2.2	1.2	2.0	2, 16
HLMP-47199.MP7	Yellow	585	Yellow Diffused	45°	1.9	2.7	1.2	10	2, 16
HLMP-47409.MP7		565	Green Diffused	65°	1.9	2.3	1.2	2.0	2, 16
HLMP-D1019.MP7		660	Red Diffused	65°	1.8	2.2	35	70	4, 16
HLMP-D1509.MP7			Red Clear	24°	1.6	1.8	1.2	3.0	4, 16
MV33509.MP7	Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4, 16
MV34509.MP7		565	Green Clear	24°	2.2	3.0	80	150	4, 16
MV37509.MP7		635	Orange Clear	24°	2.2	3.0	80	150	4, 16
MR30509.MP7		660	Red Diffused	60°	5.0	20	1.0	2.0	8,15,18
MR30519.MP7				60°	12.0	20	1.0	2.0	9,15,18
MR33509.MP7	Yellow	585	Yellow Diffused	60°	5.0	15	1.5	4.0	8,15,18
MR33519.MP7				60°	12.0	20	1.5	4.0	9,15,18
MR34509.MP7		565	Green Diffused	60°	5.0	15	1.5	4.0	8,15,18
MR34519.MP7				60°	12.0	20	1.5	4.0	9,15,18
MR37509.MP7		635	Red Diffused	60°	5.0	15	1.5	4.0	8,15,18
MR37519.MP7				60°	12.0	20	1.5	4.0	9,15,18
MV54919.MP7		660 / 565	White Diffused	100°	2.3	3.0	2.0	6.0	4,12,13,16

PCB AND PANEL MOUNT LED INDICATORS

T-1 3/4 (5mm) Multiple										
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I _F (mA) for MR Parts V _F (V)		Luminous Intensity I _V (mcd)		Notes	
					typ	max	min	typ		
MV60538.MP8B		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 17	
MV63538.MP8B	Yellow	585	Yellow Diffused	65°	2.1	3.0	3.5	18	4, 17	
MV64538.MP8B		565	Green Diffused	65°	2.2	3.0	16	25	4, 17	
MV67538.MP8B		635	Red Diffused	65°	2.1	3.0	3	14	4, 17	
MV60539.MP8B		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4, 18	
MV63539.MP8B	Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4, 18	
MV64539.MP8B		565	Green Diffused	65°	2.2	3.0	16	25	4, 18	
MV67539.MP8B		635	Red Diffused	45°	2.1	3.0	3	14	4, 18	
HLMP-47009.MP8B		635	Red Diffused	45°	1.8	2.2	1.2	2.0	2, 18	
HLMP-47199.MP8B	Yellow	585	Yellow Diffused	45°	1.9	2.7	1.2	10	2, 18	
HLMP-47409.MP8B		565	Green Diffused	45°	1.9	2.3	1.2	2.0	2, 18	
MV33509.MP8B	Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4, 18	
MV34509.MP8B		565	Green Clear	24°	2.2	3.0	80	150	4, 18	
MV37509.MP8B		635	Orange Clear	24°	2.2	3.0	80	150	4, 18	
MR30509.MP8B		660	Red Diffused	60°	12	20	1.0	2.0	8,15,18	
MR30519.MP8B		660	Red Diffused	60°	13	20	1.0	2.0	9,15,18	
MR33509.MP8B	Yellow	585	Yellow Diffused	60°	10	15	1.5	4.0	8,15,18	
MR33519.MP8B		585	Yellow Diffused	60°	13	20	1.5	4.0	9,15,18	
MR34509.MP8B		565	Green Diffused	60°	12	15	1.5	4.0	8,15,18	
MR34519.MP8B		565	Green Diffused	60°	13	20	1.5	4.0	9,15,18	
MR37509.MP8B		635	Red Diffused	60°	10	15	1.5	4.0	8,15,18	
MR37519.MP8B		635	Red Diffused	60°	13	20	1.5	4.0	9,15,18	
MV54919.MP8B		660 565	White Diffused	100°	2.1	3.0	2.0	6.0	4,13,14,18	



Notes:

- 2. V_F & I_V @ I_F = 2 mA.
- 4. V_F & I_V @ I_F = 20 mA.
- 8. I_F & I_V @ V_F = 5 V.
- 9. I_F & I_V @ V_F = 12V.
- 13. Bicolor.
- 14. The cathode is the AlGaAs Red.
Cathode for red/green bicolor LED.
- 15. Integral Resistor.
- 17. Dim A = 0.140 (3.56).
- 18. Dim A = 0.195 (4.95).
HER = High Efficiency Red

PCB AND PANEL MOUNT LED INDICATORS

T-1 3/4 (5mm) Bilevel									
Part Number	Source Color	Wave-length λ_p (nm)	Lens Color	Typical Viewing Angle	I _F (mA) for MR Parts		Luminous Intensity I _V (mcd)		Notes
					V _F (V) typ	max	min	typ	
MV60539.MP90		660	Red Diffused	65°	1.7	2.0	0.8	2.0	4
MV63539.MP93	Yellow Yellow	585	Yellow Diffused	65°	2.1	3.0	2.5	18	4
MV64539.MP94		565	Green Diffused	65°	2.2	3.0	16	25	4
MV67539.MP97		635	Red Diffused	65°	2.1	3.0	3	14	4
HLMP- 47009.MP97		635	Red Diffused	45°	1.9	2.2	1.2	2.0	2
HLMP- 47199.MP93	Yellow Yellow	585	Yellow Diffused	45°	1.9	2.7	1.2	10	2
HLMP- 47409.MP94		565	Green Diffused	45°	1.9	2.3	1.2	2.0	2
MV33509.MP93	Yellow Yellow	585	Yellow Clear	24°	2.2	3.0	80	150	4
MV34509.MP94		565	Green Clear	24°	2.2	3.0	80	150	4
MV37509.MP97		635	Orange Clear	24°	2.2	3.0	80	150	4
MR30509.MP90		660	Red Diffused	60°	12	20	1.0	2.0	8, 15
MR33509.MP93	Yellow Yellow	585	Yellow Diffused	60°	10	15	1.5	4.0	8, 15
MR34509.MP94		565	Green Diffused	60°	12	15	1.5	4.0	8, 15
MR37509.MP97		635	Red Diffused	60°	10	15	1.5	4.0	8, 15
MV54919.MP91		660 565 660 565	White Diffused	100°	2.1	3.0	2.0	6.0	4, 13, 14

