



ULTRA BRIGHT LED LAMPS(ROUND TYPES)

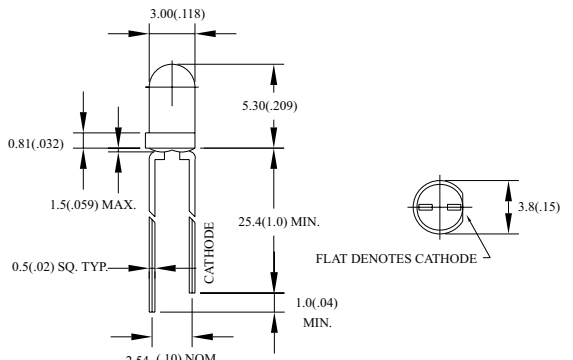
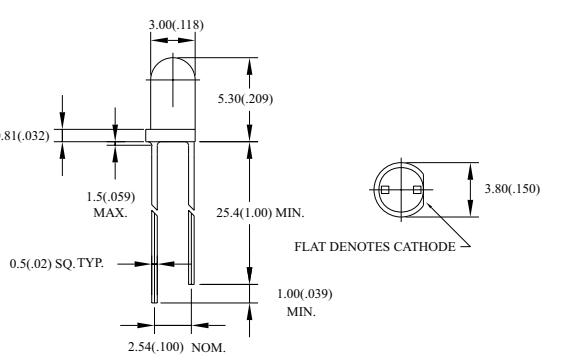
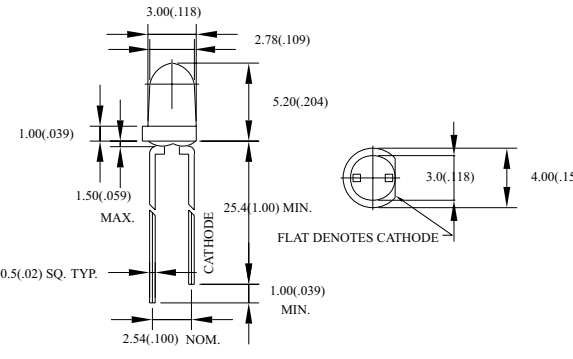
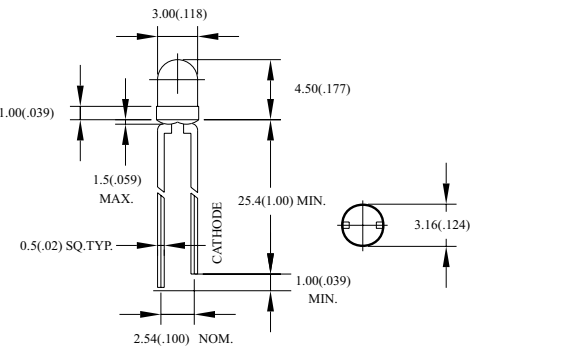
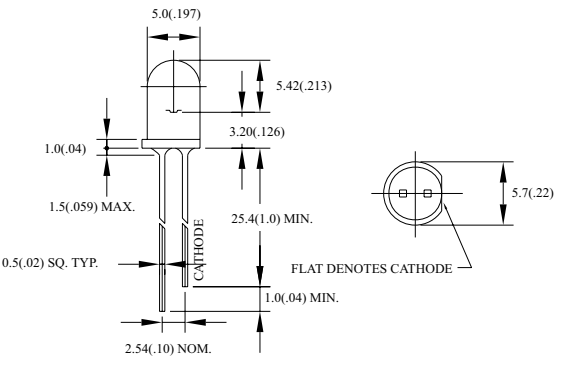
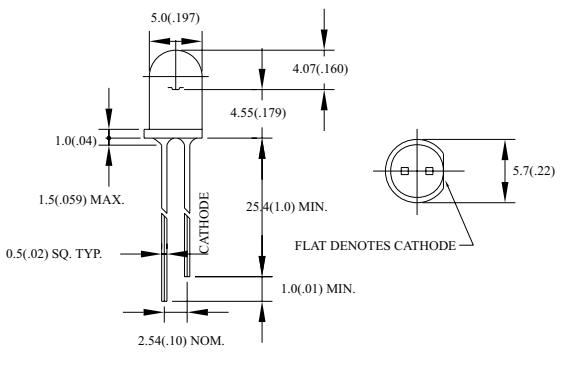
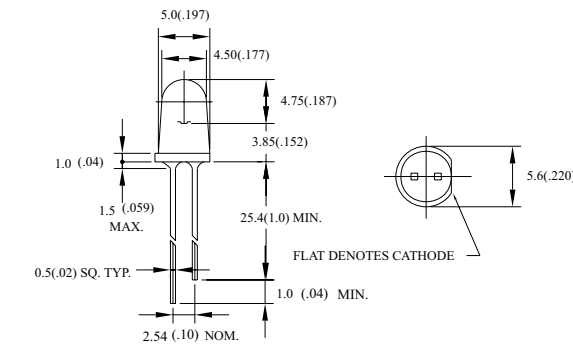
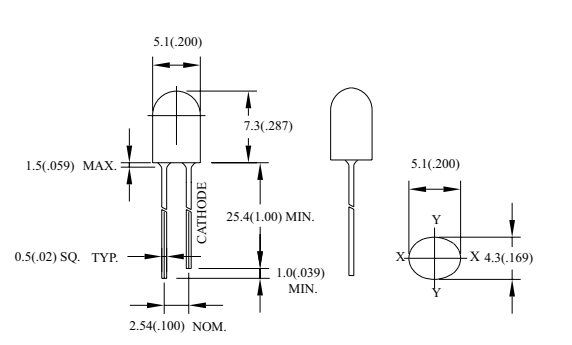
Package	Part No.	Chip		Lens Appearance	Absolute Maximum Ratings				Electro-optical Data(At 20mA)			Viewing Angle 2 θ 1/2 (deg)	Drawing No.
		Material Emitted Color	Peak Wave Length λ p(nm)		Δ λ (nm)	Pd (mw)	If (mA)	Peak (mA)	Vf (V)		Iv (mcd)		
									Typ.	Max	Typ.		
T-1 Standard 1.0" Lead 3 ϕ	BL-BS0331	GaAlAs/ SH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	300	30	L-001
	BL-BF0331	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	500		
	BL-BU0331	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	400		
	BL-BG3331	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	350		
	BL-BG4331	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	600		
	BL-BJ0331	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	800		
	BL-BK3331	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	900		
T-1 Standard 1.0" Lead 3 ϕ	BL-BD0341	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	400	30	L-002
	BL-BF1341	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	600		
	BL-BU1341	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	500		
	BL-BG2341	InGaAlP/ Super Green	662		30	75	30	150	2.4	2.8	200		
	BL-BJ1341	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1000		
	BL-BJ2341	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1200		
	BL-BK4341	InGaAlP/ Ultra Yellow	587		15	75	30	150	2.4	2.8	1200		
T-1 Narrow Viewing 1.0" Lead 3 ϕ	BL-BD0331M	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	600	15	L-003
	BL-BF4331M	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	1000		
	BL-BU2331M	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	800		
	BL-BG4331M	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	700		
	BL-BJ3331M	InGaAlP/ Ultra Orange	630		17	75	30	150	2.4	2.6	1200		
	BL-BJ5331M	InGaAlP/ Soft Orange	610		17	65	30	150	2.0	2.6	1200		
	BL-BK6331M	InGaAlP/ Ultra Yellow	592		15	75	30	150	2.4	2.8	1400		
T-1 Low Profile 1.0" Lead 3 ϕ	BL-BS0331K	GaAlAs/ SH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	250	32	L-004
	BL-BD0331K	GaAlAs/ DH Super Red	660		20	60	30	150	1.7	2.6	300		
	BL-BF4331K	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	450		
	BL-BU0331K	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	400		
	BL-BG3331K	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	300		
	BL-BJ0331K	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	600		
	BL-BK331K	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	700		
T-1 3/4 Standard 1.0"Lead 5 ϕ	BL-BD03J4	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	550	12	L-005
	BL-BG33J4	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	800		
	BL-BG43J4	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	1800		
	BL-BG63J4	InGaN/SiC/ Ultra Green	523		36	110	30	150	3.5	4.0	1300		
	BL-BK23J4	InGaAlP/ Ultra Yellow	587		15	65	30	150	2.0	2.6	2000		
	BL-BK33J4	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	2200		
T-1 3/4 Standard 1.0"Lead 5 ϕ	BL-BD03J4G-1	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	450	20	L-006
	BL-BG43J4G-1	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	1500		
	BL-BU13J4G-1	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	550		
	BL-BJ13J4G-1	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1800		
	BL-BK23J4G-1	InGaAlP/ Ultra Yellow	587		15	65	30	150	2.0	2.6	1800		
	BL-BK33J4G-1	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	1800		
	BL-BF43R4G-1	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	1200	25	
T-1 3/4 Narrow Viewing 1.0"Lead 5 ϕ	BL-BD03J7M	GaAlAs/ DDH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	1500	8	L-007
	BL-BF43R7M	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	4000		
	BL-BJ13J7M	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	3500		
	BL-BJ53J7M	InGaAlP/ Soft-Orange	610		17	65	30	150	2.0	2.6	4000		
	BL-BK33J7M	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	4500		
	BL-BK63J7M	InGaAlP/ Ultra Yellow	592		17	65	30	150	2.0	2.6	7000		
4.3x5.1x 7.3mm 1.0" Lead Oval	BL-WD03J4	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	350	X-X 35 Y-Y 25	L-008
	BL-WG33J4	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	400		
	BL-WU13J4	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	500		
	BL-WJ13J4	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1700		
	BL-WK33J4	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	1800		

Remark : 1.Hi-Eff Red / High-Efficiency Red.

2.Trans / Transparent.

3.2θ 1/2 The off-axis angle at which the luminous intensity is half the axial luminous intensity.

ULTRA BRIGHT LED LAMPS(ROUND TYPES)

L-001 BL-Bxx331 Series 	L-002 BL-Bxx341 Series 
L-003 BL-Bxx331M Series 	L-004 BL-Bxx331K Series 
L-005 BL-Bxxx3J4 Series 	L-006 BL-Bxxx4G-1 Series 
L-007 BL-Bxxx7M Series 	L-008 BL-Wxx3J4 Series 

Notes : 1.All Dimensions are in millimeters (inches).
2.Tolerance is $\pm 0.25\text{mm}$ (.010").

ULTRA BRIGHT LED LAMPS(ROUND TYPES)

Package	Part No.	Chip		Lens Appearance	Absolute Maximum Ratings				Electro-optical Data(At 20mA)			Viewing Angle 2 θ 1/2 (deg)	Drawing No.
		Material Emitted Color	Peak Wave Length λ p(nm)		Δ λ (nm)	Pd (mw)	If (mA)	Peak (mA)	Vf (V)		Iv (mcd)		
									Typ.	Max	Typ.		
T-1 Standard 1.0" Lead 3 ϕ	BL-BS0331	GaAlAs/ SH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	300	30	L-001
	BL-BF0331	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	500		
	BL-BU0331	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	400		
	BL-BG3331	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	350		
	BL-BG4331	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	600		
	BL-BJ0331	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	800		
	BL-BK3331	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	900		
T-1 Standard 1.0" Lead 3 ϕ	BL-BD0341	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	400	30	L-002
	BL-BF1341	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	600		
	BL-BU1341	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	500		
	BL-BG2341	InGaAlP/ Super Green	662		30	75	30	150	2.4	2.8	200		
	BL-BJ1341	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1000		
	BL-BJ2341	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1200		
	BL-BK4341	InGaAlP/ Ultra Yellow	587		15	75	30	150	2.4	2.8	1200		
T-1 Narrow Viewing 1.0" Lead 3 ϕ	BL-BD0331M	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	600	15	L-003
	BL-BF4331M	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	1000		
	BL-BU2331M	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	800		
	BL-BG4331M	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	700		
	BL-BJ3331M	InGaAlP/ Ultra Orange	630		17	75	30	150	2.4	2.6	1200		
	BL-BJ5331M	InGaAlP/ Soft Orange	610		17	65	30	150	2.0	2.6	1200		
	BL-BK6331M	InGaAlP/ Ultra Yellow	592		15	75	30	150	2.4	2.8	1400		
T-1 Low Profile 1.0" Lead 3 ϕ	BL-BS0331K	GaAlAs/ SH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	250	32	L-004
	BL-BD0331K	GaAlAs/ DH Super Red	660		20	60	30	150	1.7	2.6	300		
	BL-BF4331K	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	450		
	BL-BU0331K	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	400		
	BL-BG3331K	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	300		
	BL-BJ0331K	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	600		
	BL-BK331K	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	700		
T-1 3/4 Standard 1.0"Lead 5 ϕ	BL-BD03J4	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	550	12	L-005
	BL-BG33J4	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	800		
	BL-BG43J4	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	1800		
	BL-BG63J4	InGaN/SiC/ Ultra Green	523		36	110	30	150	3.5	4.0	1300		
	BL-BK23J4	InGaAlP/ Ultra Yellow	587		15	65	30	150	2.0	2.6	2000		
	BL-BK33J4	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	2200		
T-1 3/4 Standard 1.0"Lead 5 ϕ	BL-BD03J4G-1	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	450	20	L-006
	BL-BG43J4G-1	InGaN/SiC/ Ultra Green	502		30	110	30	100	3.5	4.0	1500		
	BL-BU13J4G-1	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	550		
	BL-BJ13J4G-1	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1800		
	BL-BK23J4G-1	InGaAlP/ Ultra Yellow	587		15	65	30	150	2.0	2.6	1800		
	BL-BK33J4G-1	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	1800		
	BL-BF43R4G-1	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	1200	25	
T-1 3/4 Narrow Viewing 1.0"Lead 5 ϕ	BL-BD03J7M	GaAlAs/ DDH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	1500	8	L-007
	BL-BF43R7M	GaAlAs/ DDH Super Red	660		20	65	30	150	2.0	2.6	4000		
	BL-BJ13J7M	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	3500		
	BL-BJ53J7M	InGaAlP/ Soft-Orange	610		17	65	30	150	2.0	2.6	4000		
	BL-BK33J7M	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	4500		
	BL-BK63J7M	InGaAlP/ Ultra Yellow	592		17	65	30	150	2.0	2.6	7000		
4.3x5.1x 7.3mm 1.0" Lead Oval	BL-WD03J4	GaAlAs/ DH Super Red	660	Water Clear	20	60	30	150	1.7	2.6	350	X-X 35 Y-Y 25	L-008
	BL-WG33J4	InGaAlP/ Ultra Green	574		30	75	30	150	2.4	2.8	400		
	BL-WU13J4	InGaAlP/ Ultra Red	645		20	65	30	150	2.0	2.6	500		
	BL-WJ13J4	InGaAlP/ Ultra Orange	620		17	65	30	150	2.0	2.6	1700		
	BL-WK33J4	InGaAlP/ Ultra Yellow	592		15	65	30	150	2.0	2.6	1800		

Remark : 1.Hi-Eff Red / High-Efficiency Red.

2.Trans / Transparent.

3.2 θ 1/2 The off-axis angle at which the luminous intensity is half the axial luminous intensity.

ULTRA BRIGHT LED LAMPS(ROUND TYPES)

L-001 BL-Bxx331 Series Side View Dimensions: 3.00(.118) (top width), 5.30(.209) (top height), 0.81(.032) (top offset), 1.5(.059) MAX. (top offset), 25.4(1.0) MIN. (main body height), 1.0(.04) MIN. (base height), 2.54 (.10) NOM. (base width). End View Dimensions: 3.8(.15) (width). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.	L-002 BL-Bxx341 Series Side View Dimensions: 3.00(.118) (top width), 5.30(.209) (top height), 0.81(.032) (top offset), 1.5(.059) MAX. (top offset), 25.4(1.00) MIN. (main body height), 1.00(.039) MIN. (base height), 2.54(.100) NOM. (base width). End View Dimensions: 3.80(.150) (width). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.
L-003 BL-Bxx331M Series Side View Dimensions: 3.00(.118) (top width), 2.78(.109) (top offset), 5.20(.204) (top height), 1.00(.039) (top offset), 1.50(.059) MAX. (top offset), 25.4(1.00) MIN. (main body height), 1.00(.039) MIN. (base height), 2.54(.100) NOM. (base width). End View Dimensions: 3.0(.118) (width), 4.00(.157) (height). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.	L-004 BL-Bxx331K Series Side View Dimensions: 3.00(.118) (top width), 4.50(.177) (top height), 1.00(.039) (top offset), 1.5(.059) MAX. (top offset), 25.4(1.00) MIN. (main body height), 1.00(.039) MIN. (base height), 2.54(.100) NOM. (base width). End View Dimensions: 3.16(.124) (width). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.
L-005 BL-Bxxx3J4 Series Side View Dimensions: 5.0(.197) (top width), 5.42(.213) (top height), 3.20(.126) (top offset), 1.0(.04) (top offset), 1.5(.059) MAX. (top offset), 25.4(1.0) MIN. (main body height), 1.0(.04) MIN. (base height), 2.54(.10) NOM. (base width). End View Dimensions: 5.7(.22) (width). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.	L-006 BL-Bxxx4G-1 Series Side View Dimensions: 5.0(.197) (top width), 4.07(.160) (top offset), 4.55(.179) (top height), 1.0(.04) (top offset), 1.5(.059) MAX. (top offset), 25.4(1.0) MIN. (main body height), 1.0(.01) MIN. (base height), 2.54(.10) NOM. (base width). End View Dimensions: 5.7(.22) (width). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.
L-007 BL-Bxxx7M Series Side View Dimensions: 5.0(.197) (top width), 4.50(.177) (top offset), 4.75(.187) (top height), 3.85(.152) (top offset), 1.0 (.04) (top offset), 1.5 (.059) MAX. (top offset), 25.4(1.0) MIN. (main body height), 1.0 (.04) MIN. (base height), 2.54 (.10) NOM. (base width). End View Dimensions: 5.6(.220) (width). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.	L-008 BL-Wxx3J4 Series Side View Dimensions: 5.1(.200) (top width), 7.3(.287) (top height), 1.5(.059) MAX. (top offset), 25.4(1.00) MIN. (main body height), 1.0(.039) MIN. (base height), 2.54(.100) NOM. (base width). End View Dimensions: 5.1(.200) (width), 4.3(.169) (height). Labels: CATHODE, FLAT DENOTES CATHODE, 0.5(.02) SQ. TYP.

Notes : 1.All Dimensions are in millimeters (inches).
2.Tolerance is $\pm 0.25\text{mm}$ (.010").