

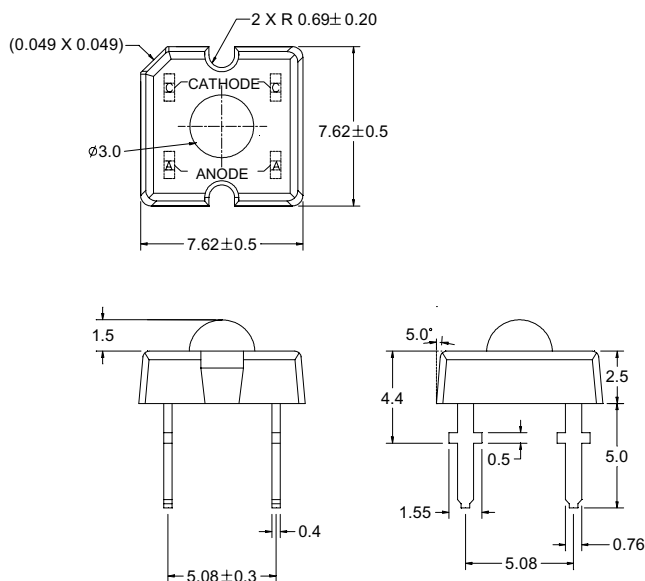


BVZ-916 SERIES

PACKAGE CONFIGURATION

DESCRIPTION

Part Number	Dice Material	Light Color	Lens Color
BVZ-916BC4	InGaN	Blue	Water Transparent
BVZ-916BC4U	InGaN	Blue	
BVZ-916GC4	InGaN	Bluish Green	
BVZ-916GC4U	InGaN	Bluish Green	
BVZ-916GS4	InGaN	Green	
BVZ-916GS4U	InGaN	Green	
BVZ-916TH4	AlInGaP/GaAs	Yellow	
BVZ-916TH4H	AlInGaP/GaAs	Yellow	
BVZ-916TT4	AlInGaP/GaP	Yellow	
BVZ-916QH4	AlInGaP/GaAs	Orange Red	
BVZ-916QH4H	AlInGaP/GaAs	Orange Red	
BVZ-916QT4	AlInGaP/GaP	Orange Red	
BVZ-916W4	InGaN	White	
BVZ-916W4U	InGaN	White	



Tolerance ± 0.25 mm

ABSOLUTE MAXIMUM RATINGS AT $T_a = 25^\circ\text{C}$

PARAMETER	DEVICE TYPE				UNIT
	BVZ-916QH4H BVZ-916TH4H	BVZ-916QT4 BVZ-916TT4	BVZ-916QH4 BVZ-916TH4	BVZ-916GS4(U) BVZ-916GC4(U) BVZ-916BC4(U) BVZ-916W4(U)	
Power Dissipation	150	182	120	140	mW
Continuous Forward Current	70	70	50	40	mA
LED Junction Temperature	125	125	125	125	$^\circ\text{C}$
Reverse Voltage ($I_R=100\mu\text{A}$)	10	10	10	5	V
Operating Temperature Range	-40 to + 100				$^\circ\text{C}$
Storage Temperature Range	-55 to + 100				$^\circ\text{C}$
Soldering Temperature	260 $^\circ\text{C}$ for 5 seconds				

ELECTRICAL / OPTICAL CHARACTERISTICS AT $T_a = 25^\circ\text{C}$

PART NUMBER	@ $I_F=\text{mA}$	V F (V)			ϕ V (mlm)		2θ 1/2 (Deg)	$R_{\theta J-PIN}$ ($^\circ\text{C}/\text{W}$)	$R_{\theta J-A}$ ($^\circ\text{C}/\text{W}$)	I R (μA)		@ $I_F=20\text{mA}$	
		MIN.	TYP.	MAX.	MIN.	TYP.				@ $V_R=V$	TYP.	$\lambda_p(\text{nm})$	$\lambda_d(\text{nm})$
BVZ-916BC4	40	3	3.7	5.2	100	500	60	90	180	10	100	468	470
BVZ-916BC4U	40	3	3.7	5.2	100	800	60	90	180	10	100	468	470
BVZ-916GC4	40	3	3.7	5.2	100	600	60	90	180	10	100	502	505
BVZ-916GC4U	40	3	3.7	5.2	100	900	60	90	180	10	100	502	505
BVZ-916GS4	40	3	3.7	5.2	100	700	60	90	180	10	100	523	525
BVZ-916GS4U	40	3	3.7	5.2	100	1000	60	90	180	10	100	523	525
BVZ-916TH4	50	1.83	2.15	2.79	600	1200	60	120	250	20	100	592	590
BVZ-916TH4H	70	1.83	2.2	2.79	600	2000	60	120	250	20	100	592	590
BVZ-916TT4	70	2.07	2.5	3.15	600	3000	60	125	250	20	100	594	592
BVZ-916QH4	50	1.83	2.15	2.79	600	1200	60	120	250	20	100	630	625
BVZ-916QH4H	70	1.83	2.2	2.79	600	2000	60	120	250	20	100	630	625
BVZ-916QT4	70	2.07	2.5	3.15	600	3000	60	125	250	20	100	640	630
PART NUMBER	@ $I_F=\text{mA}$	V F (V)			ϕ V (mlm)		2θ 1/2 (Deg)	$R_{\theta J-PIN}$ ($^\circ\text{C}/\text{W}$)	$R_{\theta J-A}$ ($^\circ\text{C}/\text{W}$)	I R (μA)		@ $I_F=20\text{mA}$	
		MIN.	TYP.	MAX.	MIN.	TYP.				@ $V_R=V$	TYP.	x	y
BVZ-916W4	40	3	3.7	5.2	600	1200	60	90	180	10	100	0.33	0.31
BVZ-916W4U	40	3	3.7	5.2	600	2000	60	90	180	10	100	0.33	0.31



BVZ-916 SERIES

BIN GRADE LIMITS LUMINOUS FLUX / lm

PART NUMBER		BIN	A	B	C	D	E	F	G	H
BVZ-916TH4H @IF=70mA	Min.		0.6	1.2	1.8	2.4	2.9	3.4	3.9	4.4
BVZ-916TT4 @IF=70mA										
BVZ-916QH4H @IF=70mA										
BVZ-916QT4 @IF=70mA										
BVZ-916TH4 @IF=50mA	Max.		1.2	1.8	2.4	2.9	3.4	3.9	4.4	6.1
BVZ-916QH4 @IF=50mA										
BVZ-916W4 @IF=40mA										
BVZ-916W4U @IF=40mA										

Tolerance ± 0.4 lm

PART NUMBER		BIN	A	B	C	D
BVZ-916BC4(U) @IF=40mA	Min.		0.1	0.4	0.7	1.0
BVZ-916GC4(U) @IF=40mA	Max.		0.4	0.7	1.0	1.3
BVZ-916GS4(U) @IF=40mA						

Tolerance ± 0.1 lm

BIN GRADE LIMITS (I F = 20 mA) DOMINANT WAVELENGTH / nm

PART NUMBER	BIN	1	2	3
BVZ-916BC4(U)	Min.	461	467	473
	Max.	467	473	479
BVZ-916GC4(U)	Min.	497	502	507
	Max.	502	507	512
BVZ-916GS4(U)	Min.	519	526	533
	Max.	526	533	540

Tolerance ± 2 nm

PART NUMBER	BIN	1	2	3
BVZ-916QH4(H)	Min.	611	616	619
BVZ-916QT4	Max.	616	619	631

Tolerance ± 3 nm

PART NUMBER	BIN	1	2	3
BVZ-916TH4(H)	Min.	584	588	592
BVZ-916TT4	Max.	588	592	596

Tolerance ± 1 nm

BIN GRADE LIMITS FORWARD VOLTAGE / V

PART NUMBER		BIN	0	1	2	3	4	5	6	7	8	9
BVZ-916BC4(U) @IF=40mA	Min.		3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9
BVZ-916GC4(U) @IF=40mA												
BVZ-916GS4(U) @IF=40mA	Max.		3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1
BVZ-916W4(U) @IF=40mA												

Tolerance ± 0.1 V

PART NUMBER		BIN	0	1	2	3	4	5	6	7	8	9
BVZ-916TH4H @IF=70mA	Min.		1.89	2.01	2.13	2.25	2.37	2.49	2.61	2.73	2.85	2.97
BVZ-916TT4 @IF=70mA												
BVZ-916QH4H @IF=70mA												
BVZ-916QT4 @IF=70mA												
BVZ-916TH4 @IF=50mA	Max.		2.01	2.13	2.25	2.37	2.49	2.61	2.73	2.85	2.97	3.09
BVZ-916QH4 @IF=50mA												

Tolerance ± 0.06 V

*Bright View reserves the rights to alter specifications and remove availability of products at any time without notice

*Dominant Wavelength, λ_d is according to CIE Chromaticity Diagram base on color of lamps.

* θ 1/2 is the off-axis angle where the luminous intensity is one half the on-axis intensity.

*These products are sensitive to static electricity.Caution must be taken strictly to avoid static electricity.