

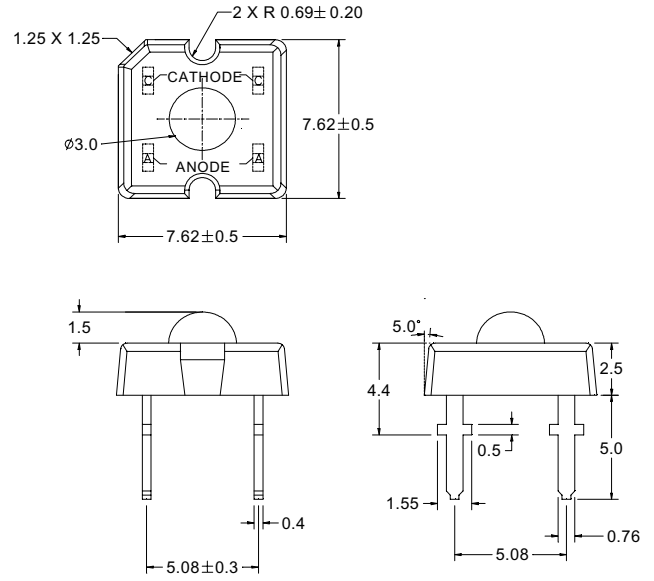


**BVZ-916 SERIES(A)**

**DESCRIPTION**

Part Number	Dice Material	Light Color	Lens Color
BVZ-916BC4(U)C	InGaN	Blue	Water Transparent
BVZ-916BC4MC	InGaN	Blue	
BVZ-916BC4HC	InGaN	Blue	
BVZ-916GC4(U)C	InGaN	Bluish Green	
BVZ-916GC4MC	InGaN	Bluish Green	
BVZ-916GC4HC	InGaN	Bluish Green	
BVZ-916GS4(U)C	InGaN	Green	
BVZ-916GS4HC	InGaN	Green	
BVZ-916TH4(H)C	AllInGaP/GaAs	Yellow	
BVZ-916TT4C	AllInGaP/GaP	Yellow	
BVZ-916QH4(H)C	AllInGaP/GaAs	Orange Red	
BVZ-916QT4C	AllInGaP/GaP	Orange Red	
BVZ-916W4(U)(M)	InGaN	White	
BVZ-916W4H	InGaN	White	

**PACKAGE CONFIGURATION**



Tolerance ± 0.25 mm

**ABSOLUTE MAXIMUM RATINGS AT Ta = 25 °C**

PARAMETER	DEVICE TYPE		UNIT
	BVZ-916TH4HC BVZ-916QH4HC	BVZ-916TT4C BVZ-916QT4C	
Power Dissipation	150	182	mW
Continuous Forward Current	70	70	mA
LED Junction Temperature	125	125	°C
Reverse Voltage (IR=100 μA)	10	10	V
Operating Temperature Range	-20 to + 80		°C
Storage Temperature Range	-30 to + 100		°C
Soldering Temperature	260 °C for 5 seconds		

**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25 °C**

PART NUMBER	@IF=mA	V F (V)			φ v (mIm)		2θ 1/2 (Deg)	RθJ-PIN (°C/W)	RθJ-A (°C/W)	I R (μA)		@IF=20mA	
		MIN.	TYP.	MAX.	MIN.	TYP.				@VR=V	TYP.	λ p(nm)	λ d(nm)
BVZ-916BC4C	40	3	3.7	5.2	300	700	50	90	180	10	100	468	470
BVZ-916BC4UC	40	3	3.7	5.2	600	1000	50	90	180	10	100	468	470
BVZ-916BC4MC	40	3	3.7	5.2	900	1900	50	90	180	10	100	468	470
BVZ-916BC4HC	20	3	3.7	4	200	300	50	90	180	10	100	468	470
BVZ-916GC4C	40	3	3.7	5.2	300	800	50	90	180	10	100	502	505
BVZ-916GC4UC	40	3	3.7	5.2	600	1100	50	90	180	10	100	502	505
BVZ-916GC4MC	40	3	3.7	5.2	900	2500	50	90	180	10	100	502	505
BVZ-916GC4HC	20	3	3.7	4	200	400	50	90	180	10	100	502	505
BVZ-916GS4C	40	3	3.7	5.2	300	900	50	90	180	10	100	523	525
BVZ-916GS4UC	40	3	3.7	5.2	600	1200	50	90	180	10	100	523	525
BVZ-916GS4HC	20	3	3.7	4	200	500	50	90	180	10	100	523	525
BVZ-916TH4C	50	1.83	2.15	2.79	600	1700	70	120	250	20	100	592	590
BVZ-916TH4HC	70	1.83	2.2	2.79	600	2500	70	120	250	20	100	592	590
BVZ-916TT4C	70	2.07	2.5	3.15	600	3500	90	125	250	20	100	594	592
BVZ-916QH4C	50	1.83	2.15	2.79	600	1700	70	120	250	20	100	630	625
BVZ-916QH4HC	70	1.83	2.2	2.79	600	2500	70	120	250	20	100	630	625
BVZ-916QT4C	70	2.07	2.5	3.15	600	3500	90	125	250	20	100	640	630
PART NUMBER	@IF=mA	V F (V)			φ v (mIm)		2θ 1/2 (Deg)	RθJ-PIN (°C/W)	RθJ-A (°C/W)	I R (μA)		@IF=20mA	
		MIN.	TYP.	MAX.	MIN.	TYP.				@VR=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-916W4M	40	3	3.7	5.2	600	4000	60	90	180	10	100	0.33	0.31
BVZ-916W4H	20	3	3.7	4	300	1000	60	90	180	10	100	0.33	0.31



**BVZ-916 SERIES(A)**

**BIN GRADE LIMITS LUMINOUS FLUX / lm**

PART NUMBER		BIN	A	B	C	D	E	F	G	H
BVZ-916TH4HC	@IF=70mA	Min.	0.6	1.2	1.8	2.4	2.9	3.4	3.9	4.4
BVZ-916TT4C	@IF=70mA									
BVZ-916QH4HC	@IF=70mA									
BVZ-916QT4C	@IF=70mA									
BVZ-916TH4C	@IF=50mA	Max.	1.2	1.8	2.4	2.9	3.4	3.9	4.4	6.1
BVZ-916QH4C	@IF=50mA									
BVZ-916W4(U)(M)	@IF=40mA									
BVZ-916W4H	@IF=20mA									

Tolerance ± 0.4 lm

PART NUMBER		BIN	A	B	C	D	E	F
BVZ-916BC4(U)(M)C	@IF=40mA	Min.	0.2	0.7	1.2	1.7	2.2	2.7
BVZ-916GC4(U)(M)C	@IF=40mA							
BVZ-916GS4(U)C	@IF=40mA							
BVZ-916BC4HC	@IF=20mA	Max.	0.7	1.2	1.7	2.2	2.7	3.2
BVZ-916GC4HC	@IF=20mA							
BVZ-916GS4HC	@IF=20mA							

Tolerance ± 0.2 lm

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

PART NUMBER		BIN	1	2	3
BVZ-916BC4(U)(M)C		Min.	461	467	473
BVZ-916BC4HC		Max.	467	473	479
BVZ-916GC4(U)(M)C		Min.	497	502	507
BVZ-916GC4HC		Max.	502	507	512
BVZ-916GS4(U)C		Min.	519	526	533
BVZ-916GS4HC		Max.	526	533	540

Tolerance ± 2 nm

PART NUMBER		BIN	1	2	3
BVZ-916TH4(H)C		Min.	584	588	592
BVZ-916TT4C		Max.	588	592	596

Tolerance ± 1 nm

PART NUMBER		BIN	1	2	3
BVZ-916QH4(H)C		Min.	611	616	619
BVZ-916QT4C		Max.	616	619	631

Tolerance ± 3 nm

**BIN GRADE LIMITS FORWARD VOLTAGE / V**

PART NUMBER		BIN	0	1	2	3	4	5	6	7	8	9
BVZ-916BC4(U)(M)C	@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)(M)C	@IF=40mA											
BVZ-916GS4(U)C	@IF=40mA											
BVZ-916BC/GC/GS4HC	@IF=20mA	Max.	3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1
BVZ-916W4(U)(M)	@IF=40mA											
BVZ-916W4H	@IF=20mA											

Tolerance ± 0.1 V

PART NUMBER		BIN	0	1	2	3	4	5	6	7	8	9
BVZ-916TH/QH4HC	@IF=70mA	Min.	1.89	2.01	2.13	2.25	2.37	2.49	2.61	2.73	2.85	2.97
BVZ-916TT/QT4C	@IF=70mA											
BVZ-916TH4C	@IF=50mA	Max.	2.01	2.13	2.25	2.37	2.49	2.61	2.73	2.85	2.97	3.09
BVZ-916QH4C	@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,  $\lambda_d$  is according to CIE Chromaticity Diagram base on color of lamps.

\* $\theta$  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.