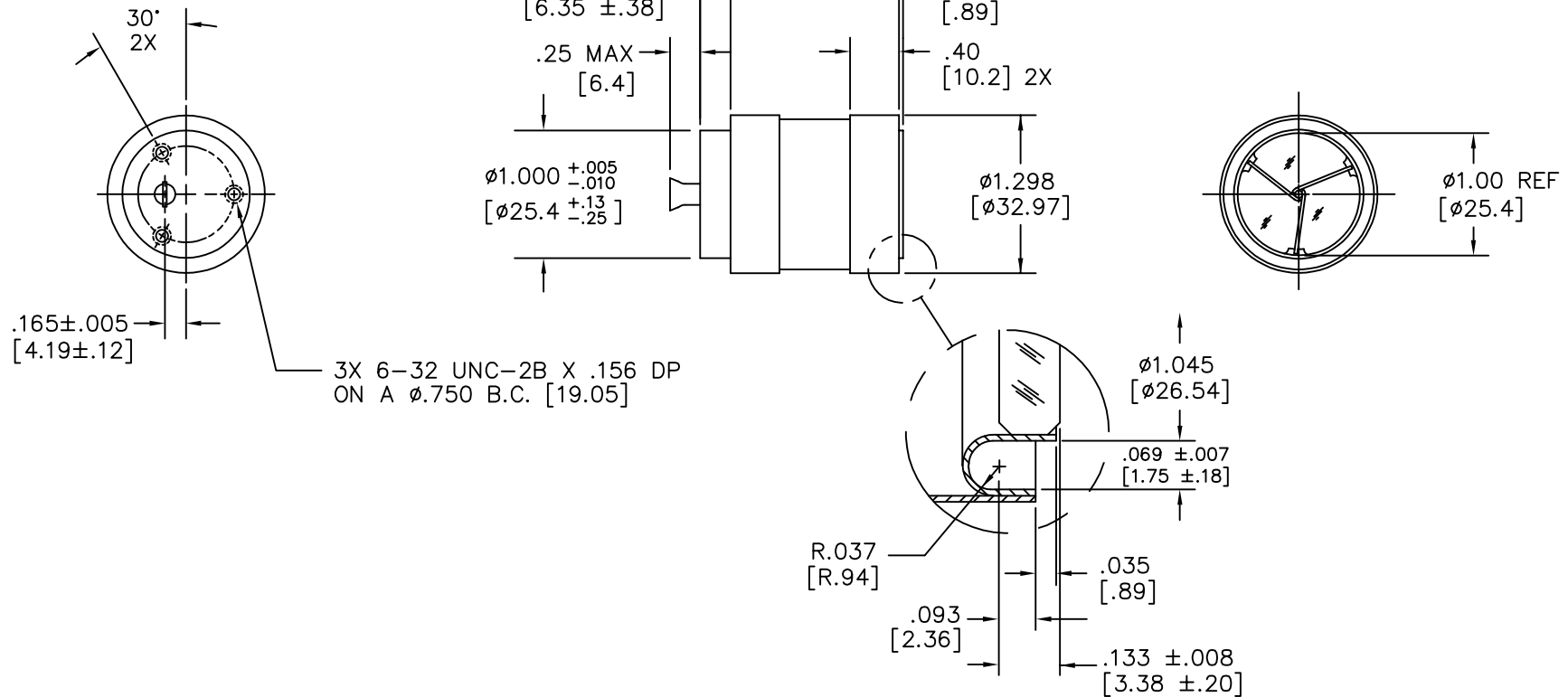


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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	REL/ECN 5319	06/03/19	K. TONG
	B	REV/ECN 30461	03/15/22	W.SURYAJAYA

NOTES:

1. THIS DRAWING APPLIES TO MODEL NUMBER: J2029
2. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS.
3. COOLING RING (P/N 216214) TO BE INCLUDED.



INTERFACE CONTROL DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/64 .XX ± .02 ± 1° .XXX ± .005 SURFACE ROUGHNESS: 125 ✓ MATERIAL: FINISH:	CONTRACT NO.		EXCELITAS TECHNOLOGIES		8 Tractor Road Singapore 627969			
	APPROVALS							
	DRAWN BY K. TONG		05/15/08		TITLE J2029 CERMAX XENON LAMP			
	CHECKED N/A							
	ENGR. N/A							
	PROJ. ENGR. K. TONG		04/20/16					
QA N/A				SIZE B	CAGE CODE 31573	DWG. NO. 233919	REV. B	
M & P N/A				SCALE NONE		DO NOT SCALE DRAWING		SHEET 1 OF 2

EXCELITAS
TECHNOLOGIES

8 Tractor Road
Singapore 627969

J2029
CERMAT XENON LAMP

SIZE B CAGE CODE 31573 DWG. NO. 233919 REV. B

J2029
300 Watt Cermax® Parabolic Lamp



	Min	Nominal	Max	Comments
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1. Ignition Requirements

1.1	Peak Ignition Voltage at Lamp Terminals (kV)	23	-	35	Not to exceed 35kV for electrical safety
1.2	Ignition Pulse Width FWHM at Lamp Terminals (ns)	75	100	150	
1.3	Recommended Boost Voltage at Lamp Terminals (Volts)	180	210	240	
1.4	Boost Current at Lamp Terminals (Amps)	-	-	66	
1.5	Boost Circuit RC discharge time (ms)	0.75	1	1.5	
1.6	Boost Energy (Joules)	1.75	2.25	2.75	
1.7	Recommended discharge energy in ignition transformer is 0.1 to 0.2 Joules.				
1.8	Main DC power supply to deliver operating current within RC discharge time of boost circuit.				
1.9	Ignition requirements are applicable throughout lamp life.				

2. Electrical

2.1	Operating Power (Watts)	180	300	320	
2.2	Operating Current (Amps)	10.0	21.0	22.0	
2.3	Initial Lamp Voltage (Volts)	13.0	14.0	16.0	May increase over lamp life
2.4	Ripple Current 0 - 1kHz (pk-pk %)	-	-	2.0	

3. Light Output / Performance at Nominal Rated Power (initial only unless otherwise specified)

3.1	Peak Intensity (Candelas)	-	4.6 x 10 ⁴ 5	-	
3.2	Radiant Output (Watts)	-	50	-	
3.3	UV Output < 390nm (Watts)	-	6.6	-	
3.4	IR Output > 770nm (Watts)	-	26.8	-	
3.5	Visible Output 390 - 770nm when new (Lumens)	3400	4500	6100	
3.6	Visible Output 390 - 770nm @ 500 hours (Lumens)	1700	2250	-	
3.7	Color Temperature (Kelvin)	-	5050	-	May decrease ~5-10% over lamp life
3.8	Beam Divergence when new - half angle @ 10% points (Degrees)	-	5	-	
3.9	Beam Divergence @100hrs - half angle @ 10% points (Degrees)	-	6	-	
3.10	Beam Divergence @1000hrs - half angle @ 10% points (Degrees)	-	7	-	
3.11	Peak instabilities 0 - 100Hz, integrated light when new (%)	-	4	6	
3.12	Peak instabilities 0 - 100Hz, integrated light @ 500 hours (%)	-	-	8	

4. Mechanical & Environmental

4.1	Window Diameter (inches / mm)	-	1.00 / 25.4	-	
4.2	Operating Temperature Lamp Ceramic Top Center (Celsius)	90	120	150	Max is at End of Life
4.3	Storage Temperature (Celsius)	-40	-	70	
4.4	Ambient Starting Temperature (Celsius)	0	-	-	
4.5	Operating Humidity (% non-condensing)	-	-	85	
4.6	Weight (Grams)	-	132	-	
4.7	Recommended Environmental Operating Pressure (hPa)	700	1010	1050	hPa=hectopascals (Pascals x 100) = millibar
4.8	Operating Orientation (Degrees from horizontal)	-45	0	45	Window face down = -90 degrees
4.9	Optical components used with lamp or lamp module should not impede air flow, nor should they reflect radiated energy back towards the lamp.				
4.10	Air flow and air inlet temperature should always ensure lamp temperature is kept within specification throughout lamp life.				
4.11	EMI characteristics may vary with operating hours and power. Adequate system precautions should be taken.				
4.12	Additional EMI may result when operating outside the recommended power range.				
4.13	Non-operating Shock & Vibration per ISTA 1A.				
4.14	RoHS Compliant.				

5. Notes

5.1	Where no minimum or maximum value is specified, the value is nominal only and may vary.
5.2	Excelitas Technologies assumes no responsibility for the suitability of this product for any particular application or any consequential damages associated with the use of this product.
5.3	Specifications subject to change without notice.