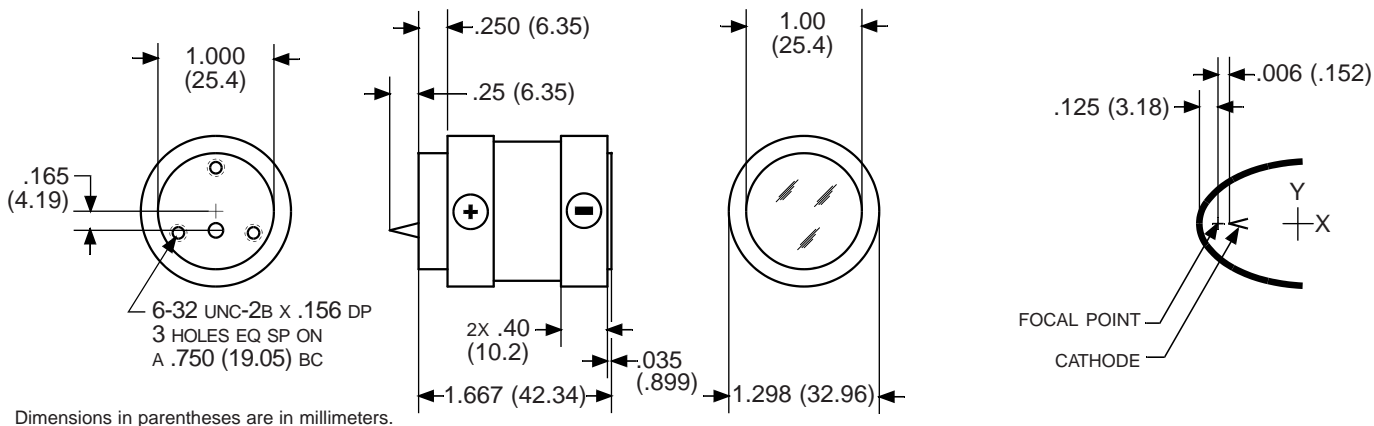


CERMAX® PULSED COLLIMATED XENON ARC LAMP

MODEL No. **FX300F** AND **FX300UV**

DIMENSIONS



OPERATIONAL SPECIFICATIONS

DESCRIPTION	NOMINAL	RANGE
POWER	60 WATTS	60-300 WATTS
PEAK CURRENT	400 AMPS	400-2000 AMPS
INPUT ENERGY	2 JOULES	0.1-5 JOULES
PULSE DURATION	2 μ SECONDS	2-5 μ SECONDS
REPETITION RATE	≤ 1000 HERTZ (BASED ON POWER SUPPLY)	
IGNITION VOLTAGE	10 KILOVOLTS (RECOMMENDED MINIMUM)	
DELAY	500-700 NANOSECONDS	
JITTER	< 200 NANOSECONDS	
TEMPERATURE	150° C (MAXIMUM)	
LIFETIME*	30-90 MILLION PULSES AT 2J/PULSE	

* END OF LAMP LIFE IS DEFINED AS 50% OF INITIAL OUTPUT

PHYSICAL SPECIFICATIONS

DESCRIPTION	SPECIFICATION
ARC GAP	.055 INCH (1.4 MM)
REFLECTOR GEOMETRY	PARABOLIC $Y^2=0.5X$ INCH
WEIGHT	130.5 GRAMS
WINDOW DIAMETER	1 INCH (25.4 MM)

RADIANT BEAM CHARACTERISTICS

"F" = UV FILTERED OUTPUT / "UV" = UV ENHANCED OUTPUT

DESCRIPTION	SPECIFICATION
COLOR TEMPERATURE	12000 KELVIN
PEAK INSTABILITIES	8-18% FOR FOCUSED 0.03" SPOT, 1-2 μF AT 1000 VOLTS, FULL BEAM
BEAM GEOMETRY	0.25" FWHM USING F/1.0 ASPHERIC LENS

DESCRIPTION	INPUT ENERGY	OUTPUT ENERGY
RADIANT OUTPUT*	0.25 J/PULSE	8 MJ/PULSE
	0.5 J/PULSE	12 MJ/PULSE
	1.0 J/PULSE	18 MJ/PULSE
	1.5 J/PULSE	23 MJ/PULSE
	2.0 J/PULSE	29 MJ/PULSE

* THESE VALUES INDICATE TOTAL OUTPUT IN ALL DIRECTIONS.

COMPATIBLE ILC EQUIPMENT

DESCRIPTION	PART NUMBERS
LAMP HOUSING	R400-1, HP4-A1-0

NOTES

- Lamp must not be operated with window facing upwards within 45° of vertical.
- Seal temperature must not exceed 150° C.
- Current/power regulated power supplies and ILC lamp housing R400 are recommended.
- Lamp must be operated within recommended current and power range. Over powering may lead to arc instability, hard starting and premature aging.
- Hot mirror assembly A200HMP is available for IR filtering.
- CERMAX lamps are much safer lamps to use than their quartz xenon arc lamp equivalents. However, caution must be practiced when operating lamps because they are under high pressure, require high voltage, reach temperatures up to 200° C, and their IR and UV radiation can cause skin burns and eye damage. Read hazard sheet included with each lamp shipment.