



Excellence in Electronics

TYPE OC2

The OC2 is a cold cathode, gas-filled diode of miniature construction designed for use as a voltage regulator. It has an operating current range of 5 to 30 milliamperes over which it maintains a substantially constant operating voltage of 75 volts. Three cathode pins are provided which may be used to disconnect the load when the tube is removed from the socket.

MECHANICAL DATA

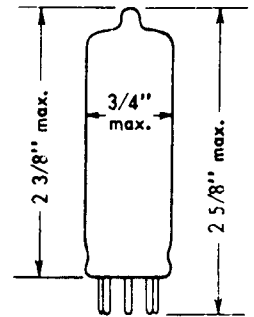
ENVELOPE: T-5 1/2 Glass

BASE: Miniature Button 7-Pin

TERMINAL CONNECTIONS:

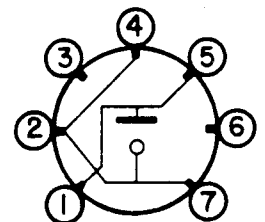
- Pin 1 Anode
- Pin 2 Cathode
- Pin 3 Internal Connection (Do not use)
- Pin 4 Cathode
- Pin 5 Anode
- Pin 6 Internal Connection (Do not use)
- Pin 7 Cathode

MOUNTING POSITION: Any



ELECTRICAL DATA

CAUTION-To Electronic Equipment Design Engineers: Special attention should be given to the temperature of the tubes. Reliability will be seriously impaired if maximum bulb temperature is exceeded. The life expectancy may be reduced if conditions more severe than those specified for life test are imposed on the tube and will be reduced appreciably if absolute ratings are exceeded. Attention should be given to the specified minimum supply voltage to insure operation in total darkness. Tube characteristics may deteriorate markedly if the tubes are stored at elevated ambient temperatures without drawing current.



BOTTOM VIEW 5B0

RATINGS AND NORMAL OPERATION:	MIL-E-1 SYMBOL	ABSOLUTE MINIMUM	NORMAL OPERATION	ABSOLUTE MAXIMUM	MIL-E-1 UNITS
Total Darkness Starting Voltage:	Ez:	145	----	----	Vdc
Ambient Light Starting Voltage:	Ez:	115	----	----	Vdc
Operating Current Range:	lb:	5	----	30	mAdc
Operating Voltage Range:	Etd:	68	75	83	Vdc
Bulb Temperature:	T-Bulb	-55	----	150	°C
Regulation:	Reg:	----	3	4.5	Vdc
Starting Current: ▲	Iz	----	----	75	ma.
Ambient Temperature:	TA	-55	----	90	°C
Anode Supply Voltage:	Ebb	115	----	----	Vdc
Series Resistor ♦	----	----	----	----	----
Shunt Capacitor:	Cs	----	----	0.1	µfd.

▲ Averaged over starting period not exceeding 10 seconds.

♦ Sufficient resistance must always be used in series with the OC2, to limit the current through the tube. The value of the series resistor is dependent on the maximum anode supply voltage and the ratio of the current through the load to the operating current of the OC2, and should be chosen to limit the operating current through the tube to 30 ma. at all times after the starting period.

Tentative Data

INDUSTRIAL COMPONENTS DIVISION RAYTHEON COMPANY