

## MODEL 40044I SPECIFICATIONS

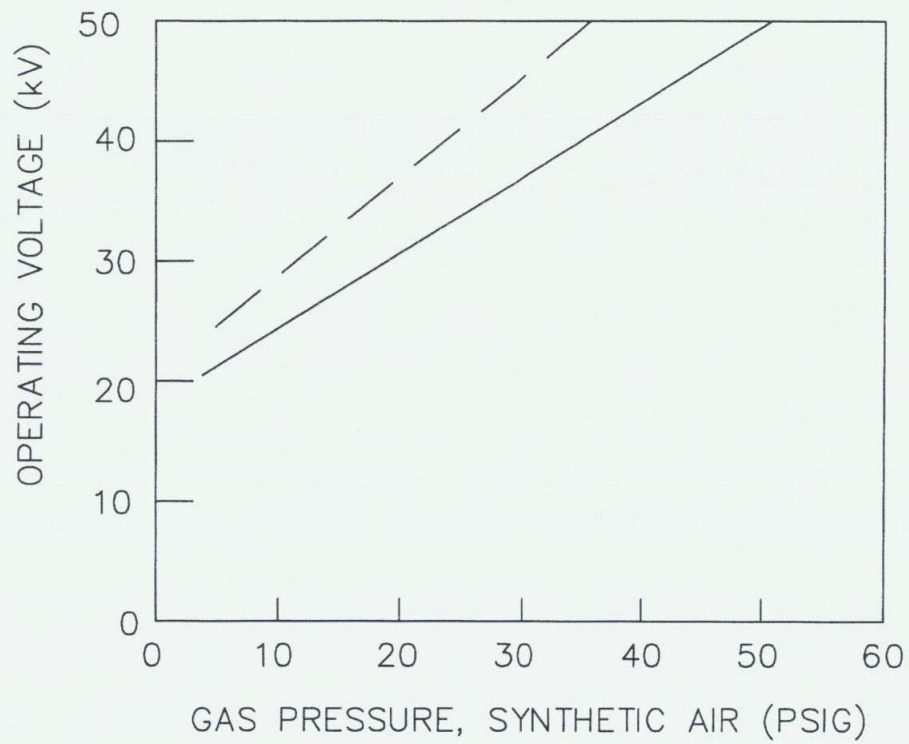
<u>PARAMETER</u>	<u>SPECIFICATION</u>
OPERATING VOLTAGE	20-50kV
MAX. PEAK CURRENT	50kA
MAX. CHARGE TRANSFER	0.3Cb
INDUCTANCE	<20nH
DESIGN SHOT LIFE	10,000
EXTERNAL OPERATING ENVIRONMENT	AIR ,Sf <sub>6</sub> , OIL
INTERNAL OPERATING GAS	SYNTHETIC AIR
TRIGGER ELECTRODE BIASING	V/3
JITTER (USING TITAN TRIGGER GENERATOR MODEL 40295)	<15nS
JITTER (USING TITAN TRIGGER GENERATOR MODEL 40168)	<2nS

## MODEL 40044I GAS INPUT SPECIFICATION

<u>PARAMETER</u>	<u>SPECIFICATION</u>
TYPE	SYNTHETIC AIR
GRADE	INSTRUMENT OR BETTER
NITROGEN	79% BY VOLUME
OXYGEN	21% BY VOLUME
WATER CONTENT	<5 ppm BY WEIGHT
DEW POINT	-65 DEGREES C OR LOWER
PARTICLE SIZE	<5 MICRONS
CARBON DIOXIDE	ZERO

SIZE	FSCM	DRAWING NUMBER
A	4U842	M-C002-00109
		SHEET 2

# MODEL 40044I OPERATING CURVE

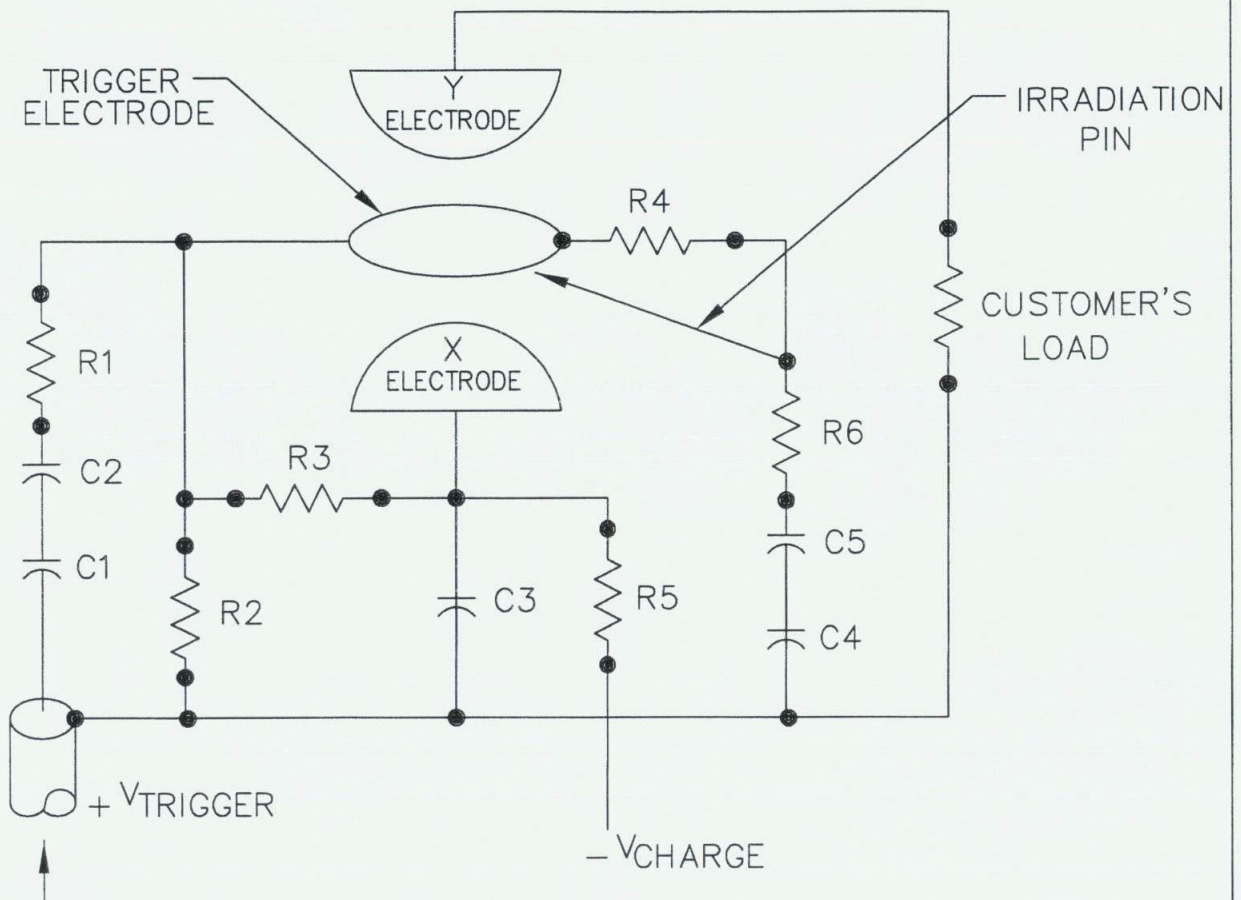


$$M = \frac{V_{\text{STATIC BREAKDOWN}}}{V_{\text{OPERATING VOLTAGE}}}$$

- - - - - STATIC BREAKDOWN  
 \_\_\_\_\_ OPERATING VOLTAGE

SIZE	FSCM	DRAWING NUMBER
A	4U842	M-C002-00109
		SHEET 3

# MODEL 40044I TYPICAL CIRCUIT ARRANGEMENT

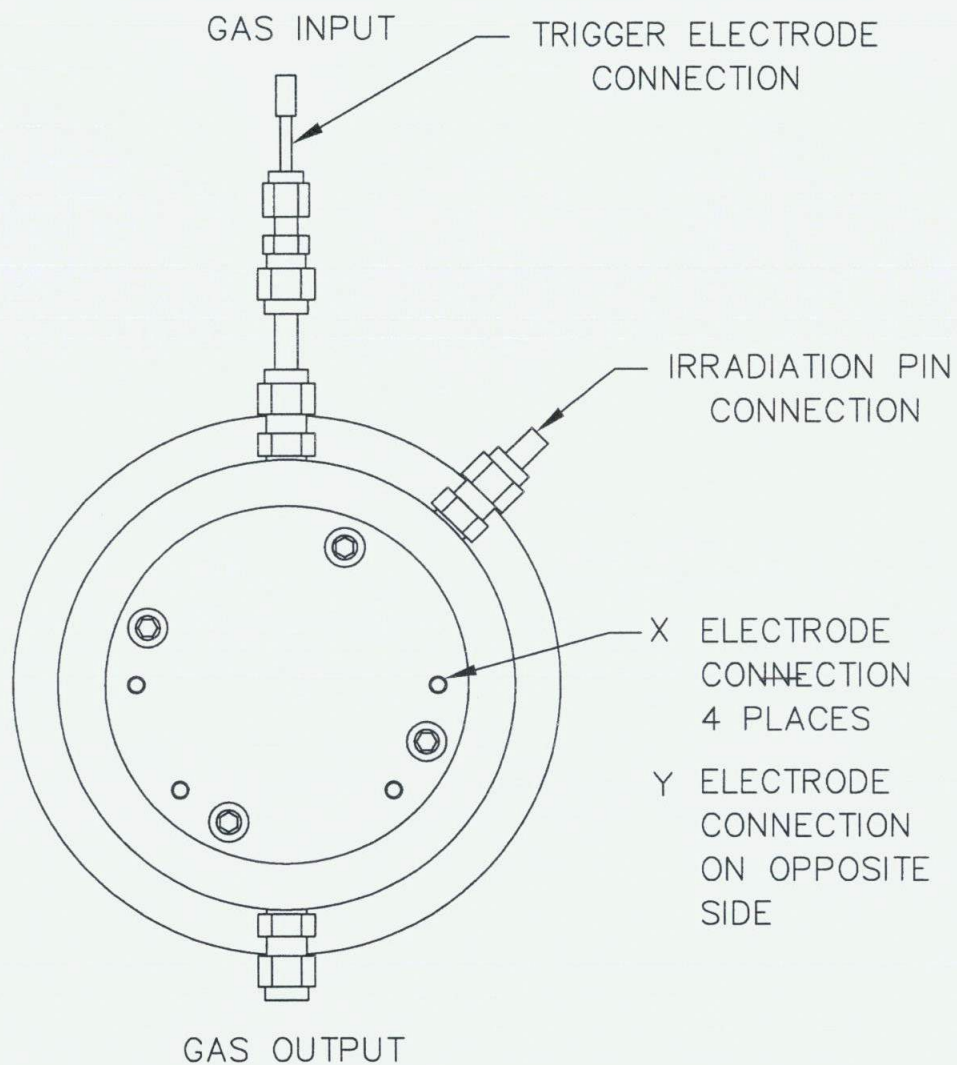


- C1 = 500pF 30kV (SPRAGUE #30DK-T5)  
 C2 = 500pF 30kV (SPRAGUE #30DK-T5)  
 C3 = CHARGE CAPACITOR (CUSTOMER DETERMINES)  
 C4 = 500pF 30kV (SPRAGUE #30DK-T5)  
 C5 = 500pF 30kV (SPRAGUE #30DK-T5)

- R1 = 150 OHM NON-INDUCTIVE (CESIWD #887AS151L)  
 R2 = 50M OHMS 6 WATT (CABLEFORM #CFH-W-2-10-50M)  
 R3 = 100M OHMS 6 WATT (CABLEFORM #CFH-W-2-10-100M)  
 R4 = 5M OHMS 2 WATT (CABLEFORM #CFD-W-2-20-5M)  
 R5 = CURRENT LIMITING RESISTOR (CUSTOMER DETERMINES)  
 R6 = 20k OHMS 2 WATT (CABLEFORM #CFD-W-2-20-20k)

SIZE	FSCM	DRAWING NUMBER
A	4U842	M-C002-00109
		SHEET 4

# MODEL 40044I ELECTRODE CONNECTIONS



SIZE	FSCM	DRAWING NUMBER
A	4U842	M-C002-00109
		SHEET 5