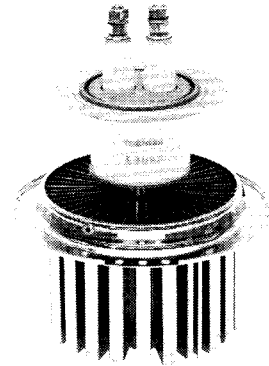


# TRIODE E3097 Forced Air Cooling

Uses (用途)	Switch & Regulator (高電圧スイッチ 及びレギュレータ)
DC Plate Voltage (陽極直流電圧)	20 kV (Max.)
Plate Dissipation (陽極損失)	1.5 kW (Max.)



## GENERAL DATA (一般定格)

### ELECTRICAL (電氣的定格) :

Filament : Thoriated Tungsten  
(フィラメント : トリウム・タングステン)

Voltage (電圧) ..... 6.3 V

Current (電流) ..... 22 A

Transconductance ..... 6.5 mS  
(相互コンダクタンス)

Amplification Factor (増幅率) ..... 35 -

Interelectrode Capacitances (電極間静電容量) :

Filament - Grid (フィラメント-グリッド) ..... 12 pF

Grid - Plate (グリッド-陽極) ..... 12 pF

Filament - Plate (フィラメント-陽極) ..... 0.4 pF

### MECHANICAL (機械的定格) :

Overall Dimensions (外形寸法) :

Length (全長) ..... 176 mm

Diameter (Max.) (直径) ..... 130 mm (Max.)

Mass (質量) ..... 1 kg

Mounting Position (使用位置) ..... Vertical(垂直)  
Anode Up or Down

Cooling (冷却) :

Plate : Forced Air Cooling (強制空冷)

Minimum Air Flow (Plate dissipation 1.5kW) ..... 3.5 m<sup>3</sup>/min  
(最小風量 陽極損失 1.5kW)

Minimum Static Flow Loss (最小静圧) ..... 13 mm water

Maximum Temperature of Radiator (最高ラジエータ温度) ..... 250 °C

Recommended Air Jacket (推奨空冷筒) ..... TOSHIBA VT-29032A

# E3097

## ABSOLUTE MAXIMUM RATINGS (絶対最大定格) :

DC Plate Voltage (陽極直流電圧) .....	20	kV
DC Grid Voltage (グリッド直流電圧) .....	-1.5	kV
DC Plate Current (陽極直流電流) .....	0.8 1.5 <sup>(1)</sup>	A
Plate Dissipation (陽極損失) .....	1.5 5 <sup>(1)</sup>	kW
Grid Dissipation (グリッド損失) .....	10	W

Note:

(1) Maximum pulse width 10ms and duty factor 10%.

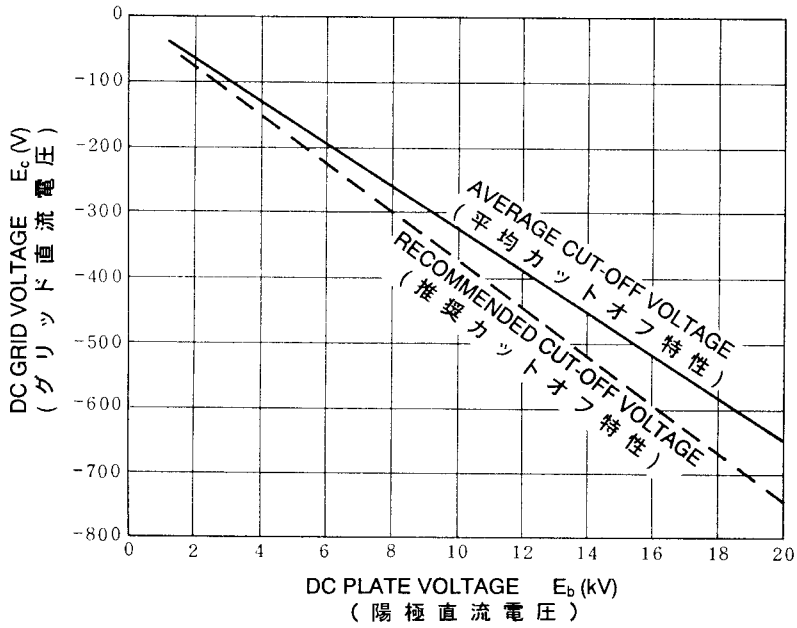
(パルス幅 10ms 以下、デューティサイクル 10%以下の場合。)

## TYPICAL OPERATION (動作例) :

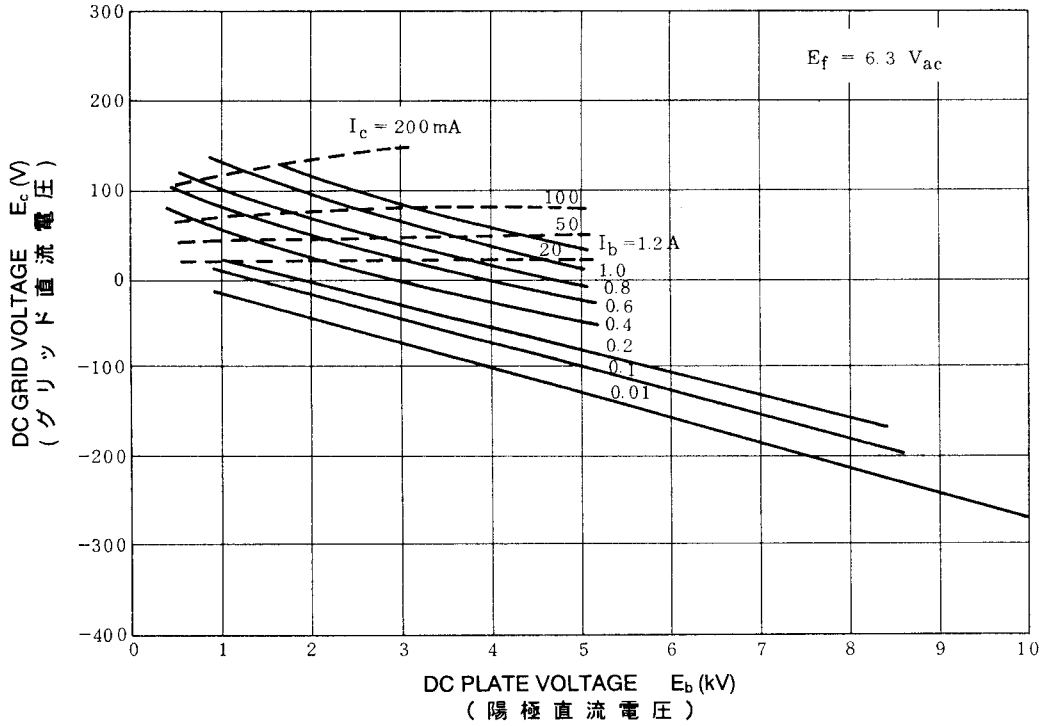
Duty factor 10%				
DC Plate Voltage (Laser off) .....	10	12	15	kV
(陽極直流電圧 レザ-オフ)				
DC Grid Voltage (Laser off) .....	-370	-450	-560	V
(グリッド直流電圧 レザ-オフ)				
DC Plate Voltage (Laser on) .....	5	5.5	6	kV
(陽極直流電圧 レザ-オン)				
DC Plate Current (Laser on) .....	700	650	600	mA
(陽極直流電流 レザ-オン)				
DC Grid Voltage (Laser on) .....	-35	-50	-75	V
(グリッド直流電圧 レザ-オン)				
Plate Dissipation (pulse) .....	3.5	3.6	3.6	kW
(陽極損失 パルス)				
Laser Output power (pulse) .....	3.5	4.2	5.4	kW
(レーザ-出力 パルス)				

AVERAGE PLATE CUT-OFF VOLTAGE  
 (平均陽極カットオフ特性)

DC PLATE CURRENT  $I_b = 10 \mu \text{A}$  dc  
 (陽極直流電流  $I_b = 10 \mu \text{A}$  dc)

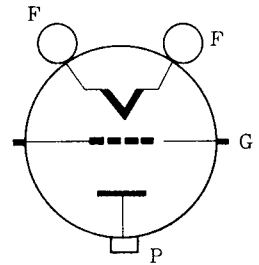
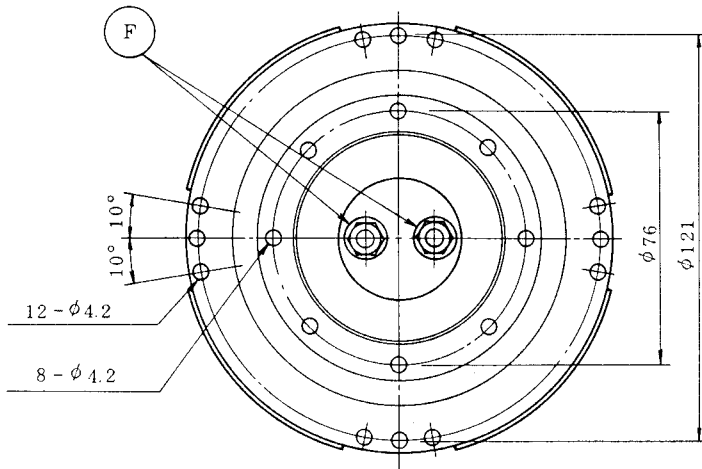


AVERAGE CONSTANT CURRENT CHARACTERISTICS  
 ( 平均定電流特性 )



DIMENSIONAL OUTLINE  
(外形図)

Unit: mm  
(単位)



P : Plate  
(陽極)  
G : Grid  
(グリッド)  
F : Filament  
(フィラメント)

