TO : Lyncean Technologies , Inc.

INSPECTION SHEET

TR000037 Canon Klystron E3730A Inspection Sheet SN 20M107

HIGH POWER PULSE KLYSTRON

E3730A S/N 20M107

CANON ELECTRON TUBES & DEVICES CO., LTD.

TEST CLASSIFICATION	AQL	n1	d1	n1+n2	d1+d2	JUDGE
APPEARANCE						
PRODUCTION						
DESIGN						

INSPECTION SHEET

TYPE HIGH POWER PULSE KLYSTRON
E3730A

APPLIED SPECIFICATION	PRODUCT SPECIFICATION	
SUPPLY QUANTITY	1	DATE OF INSP. 13-Dec-2020
CHIEF OF INSPECTION SECTION	Y. Tanaka	

TEST CONDITION ELECTROMAGNET VT-68922

ITEM	STATIC			DYNAMIC								JUDGE
	VACUUM CHECK	HEATER CURRENT	BEAM CURRENT	OUTPUT POWER	BEAM VOLTAGE	BEAM CURRENT	DRIVE POWER	GAIN	EFFICIENCY	PERVEANCE	X-ray Leakage	
SYMBOL	Iion	If	ik	po	epy	ik	pd	Gp	η	G		
UNIT	[μA]	[A]	[A]	[MW]	[kV]	[A]	[W]	[dB]	[%]	[μA/V$^{1.5}$]	[μSv/h]	
CONDITION	No operating voltage	Ef=15.2[V] (Ef ≦20[V])	Ef=15.2[V] epy=310[kV] tp(epy)=6.2[μs] fp=50[pps]	Ef=15.2[V] fo = 2856 [MHz] , tp(rf) = 4.0 [μs] , tp(epy) = 6.2 [μs] , fp = 50 [pps] Isol = (18.3, 29.3, 14.2, 16.7, 12.2, 4.7) [A]								
No.												
20M107	0.01	17.0	370	50.6	316	380	259	52.9	42.2	2.14	9.3	OK
SPEC MIN.	–	–	345.2	50	–	–	–	50	42	1.95	–	INSPECTOR
SPEC PAR	–	–	–	–	–	–	–	–	–	2.1	–	Mishibazaki
SPEC MAX.	4.0	20	379.8	–	320	–	500	–	–	2.2	20	

TYPE E3730A series

CANON ELECTRON TUBES & DEVICES CO., LTD.

TEST CLASSIFICATION	AQL	n1	d1	n1+n2	d1+d2	JUDGE
APPEARANCE						
PRODUCTION						
DESIGN						

INSPECTION SHEET

TYPE HIGH POWER PULSE KLYSTRON E3730A

APPLIED SPECIFICATION	PRODUCT SPECIFICATION	
SUPPLY QUANTITY	1 DATE OF INSP.	13-Dec-2020
CHIEF OF INSPECTION SECTION	Y. Tanaka	

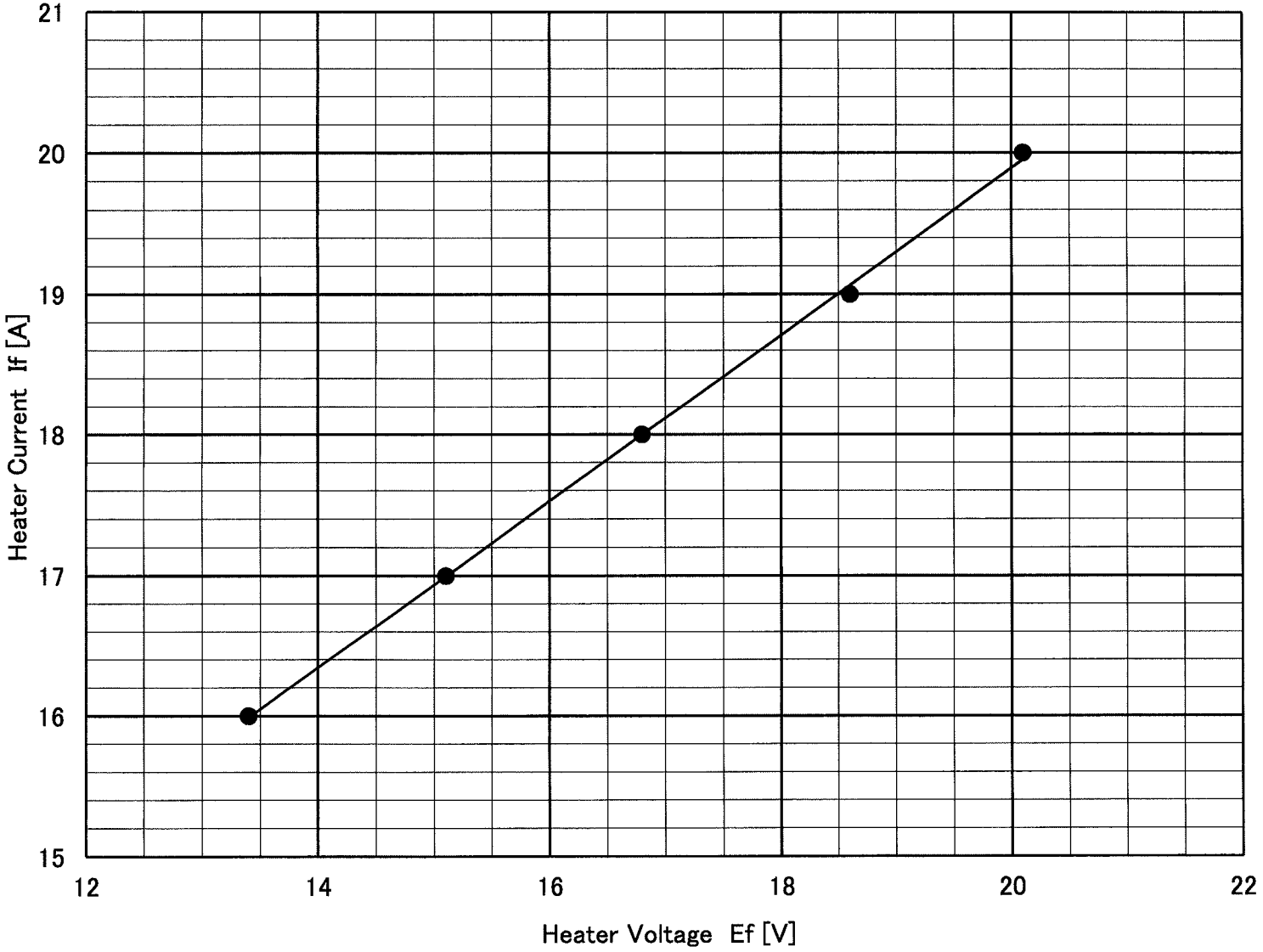
TEST CONDITION

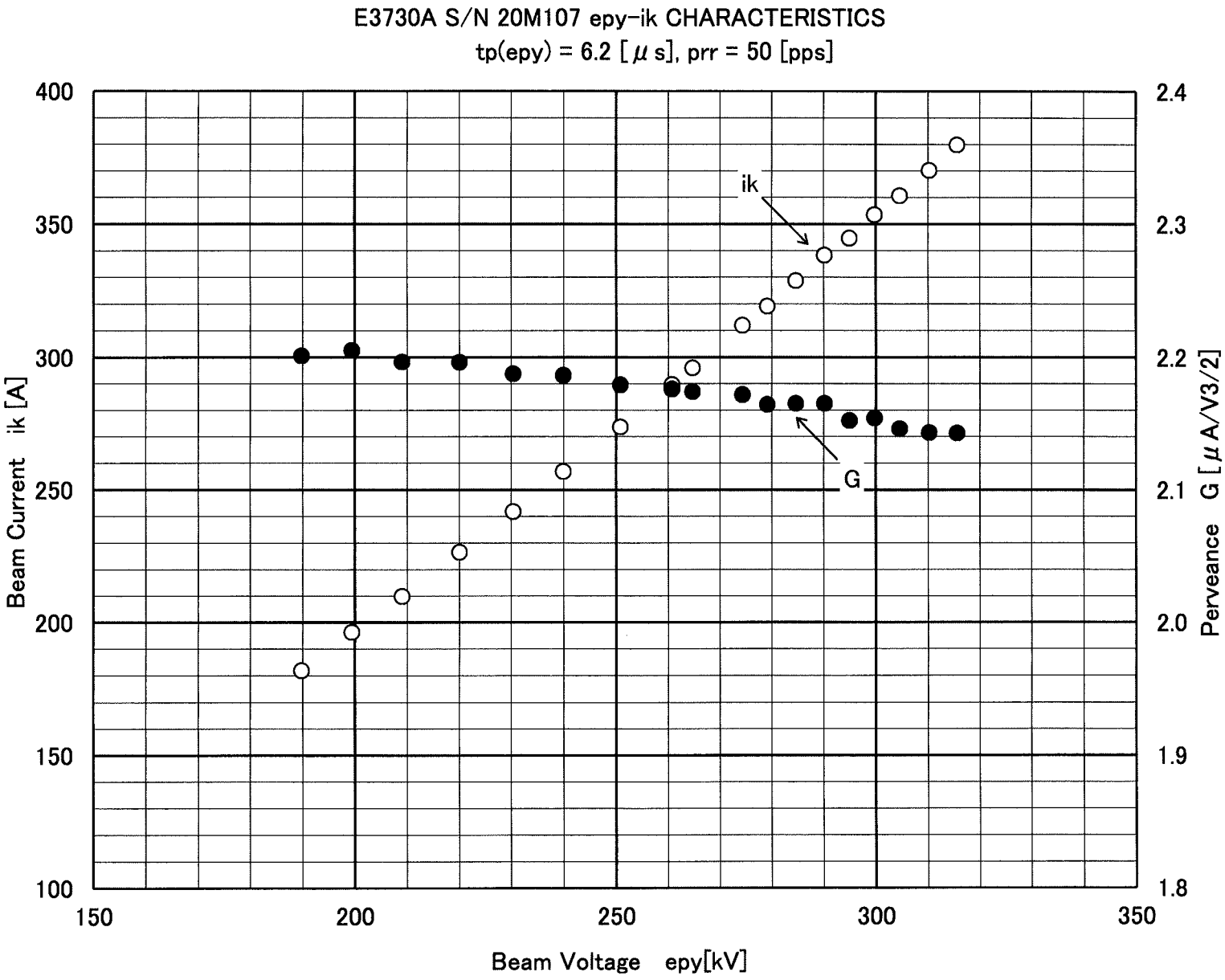
ITEM / SYMBOL / UNIT	HYDROSTATIC PRESSURE – –	OUTLINE DIMENSION		JUDGE
CONDITION	P = 0.98 [MPa] (10 [kgf/cm^2]) t = 15 min.	–		
No.				
20M107	OK	OK		OK
SPEC. MIN.	No visible leaks	No detectable		INSPECTOR
SPEC. PAR	and no damages	change in the ion		M.Shibazaki
SPEC. MAX.		pump indicator		

TYPE E3730A series

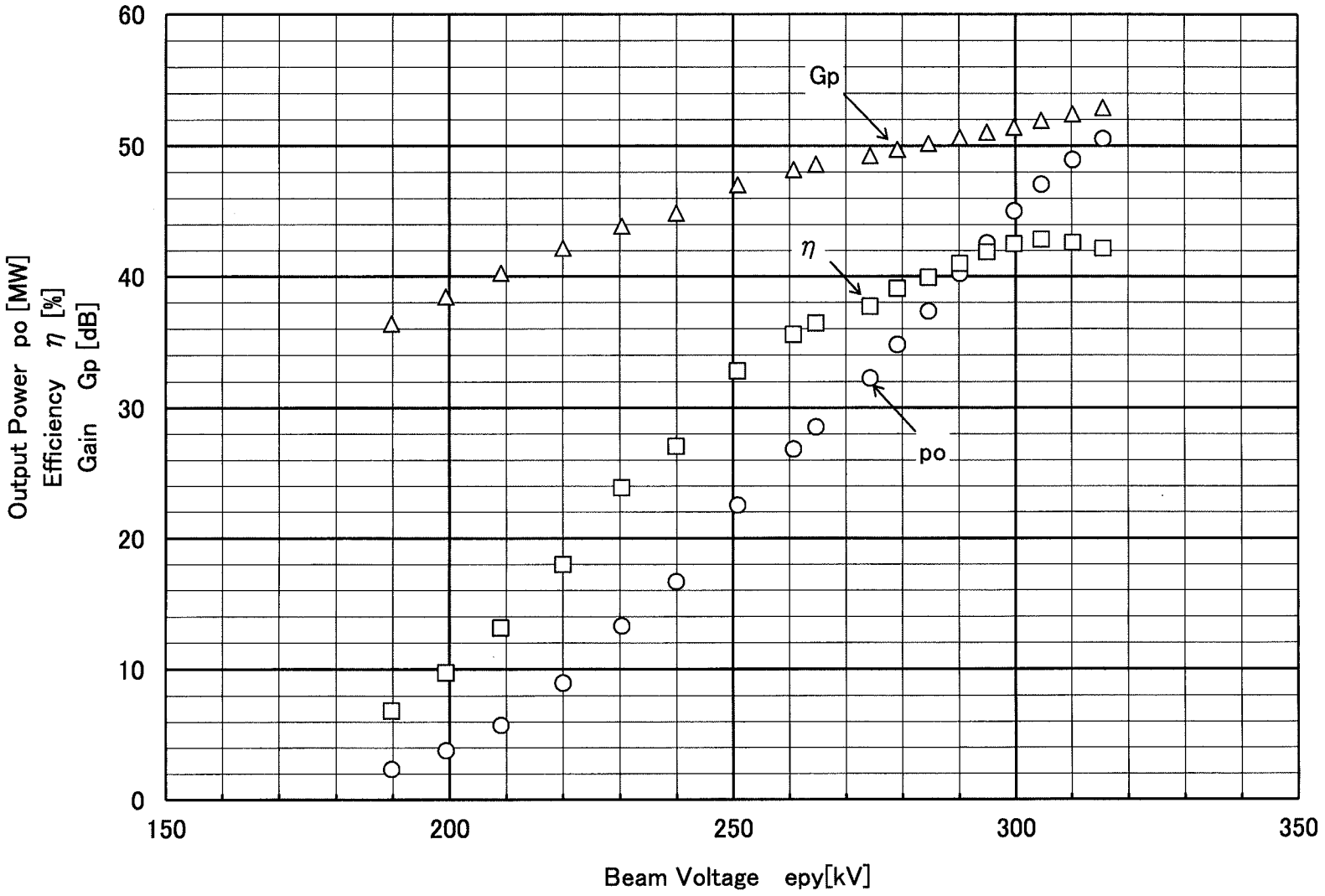
CANON ELECTRON TUBES & DEVICES CO., LTD.

E3730A S/N 20M107　HEATER CHARACTERISTICS




E3730A S/N 20M107 epy-ik CHARACTERISTICS
tp(epy) = 6.2 [μs], prr = 50 [pps]
Beam Current ik [A]
Perveance G [μA/V3/2]
Beam Voltage epy[kV]
400
350
300
250
200
150
100
2.4
2.3
2.2
2.1
2.0
1.9
1.8
150
200
250
300
350
ik
G

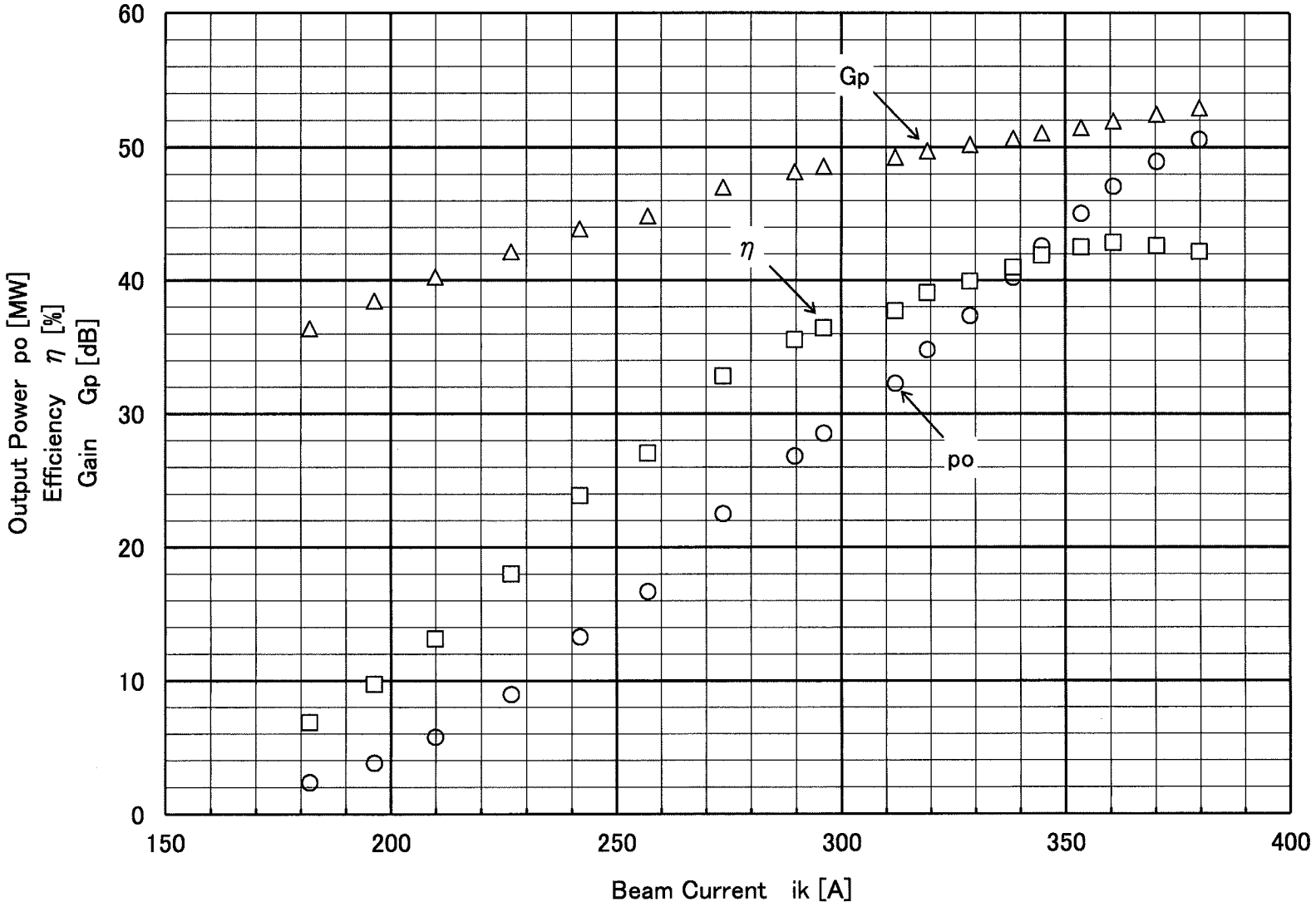
E3730A S/N 20M107 SATURATED OUTPUT CHARACTERISTICS (1)
tp(rf) = 4.0 [μ s], prr = 50 [pps],
Isol = (18.3 , 29.3 , 14.2 , 16.7 , 12.2 , 4.7) [A]



E3730A S/N 20M107 SATURATED OUTPUT CHARACTERISTICS (2)

tp(rf) = 4.0 [μ s], prr = 50 [pps],

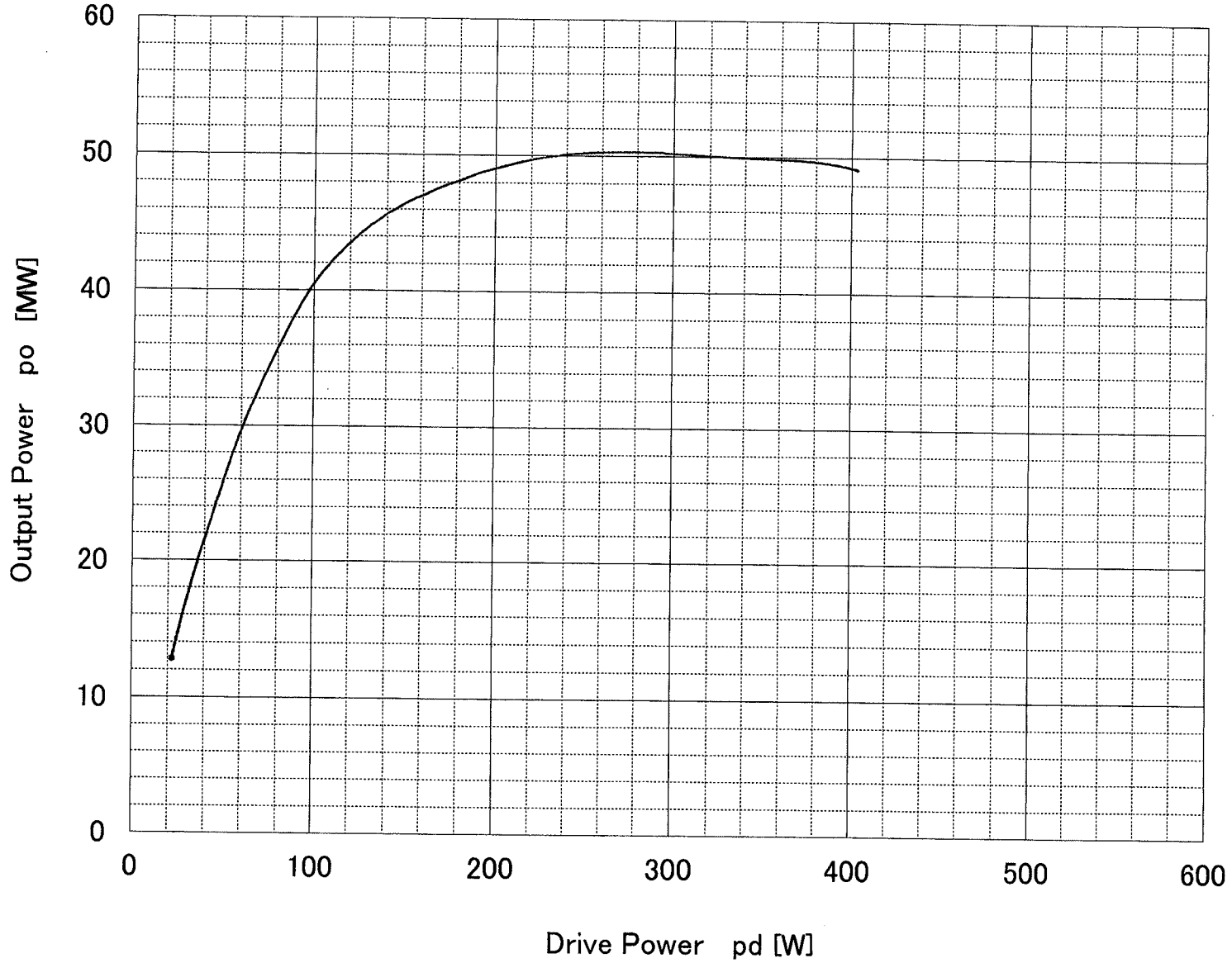
Isol = (18.3 , 29.3 , 14.2 , 16.7 , 12.2 , 4.7) [A]

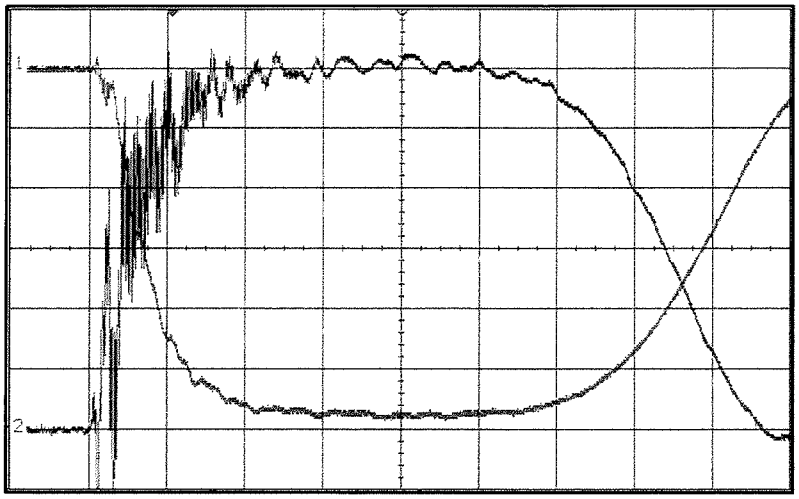


E3730A S/N 20M107 POWER TRANSFER CHARACTERISTICS

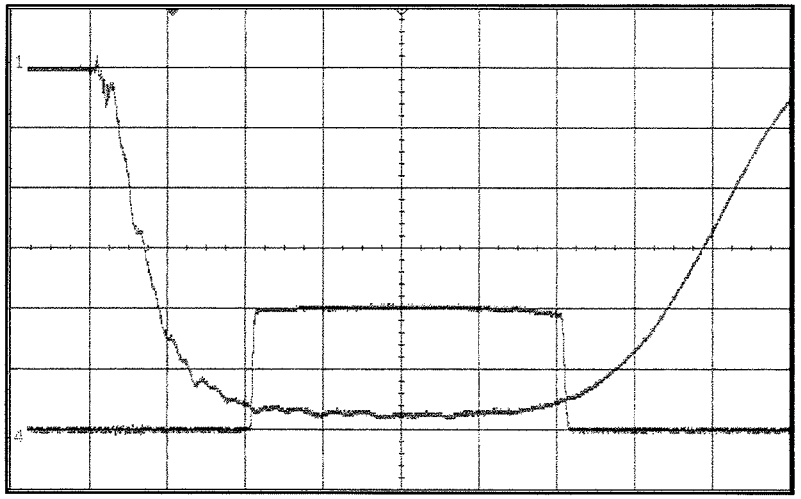
tp(rf) = 4.0 [μs], prr = 50 [pps], epy= 316 [kV], ik= 380 [A],

Isol = (18.3 , 29.3 , 14.2 , 16.7 , 12.2 , 4.7)[A]

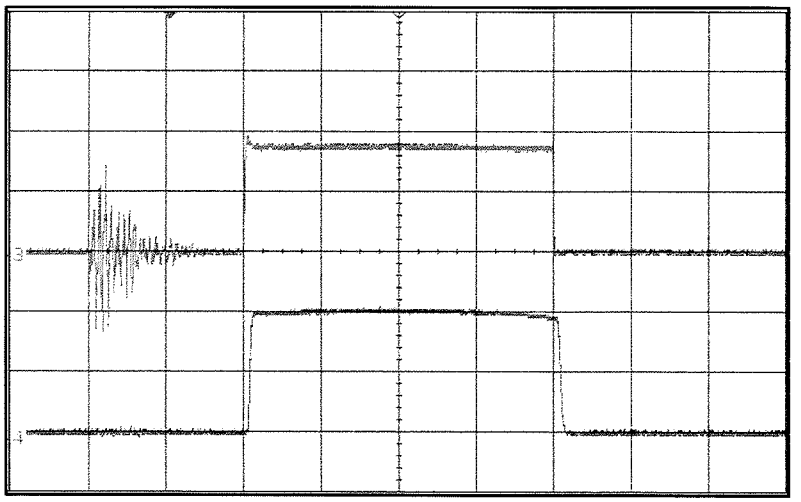




Beam Voltage Vk and Cathode Current Ik
(X-axis : 1[μ s/div.], epy= 316 [kV], ik= 380 [A])



Beam Voltage Vk and Output Power Po
(X-axis : 1[μ s/div.], epy= 316 [kV], po= 50.6 [MW])



Drive Power Pd and Output Power Po
(X-axis : 1[μ s/div.], pd = 259 [W], po= 50.6 [MW])