

TO : Lyncean Technologies , Inc.

INSPECTION SHEET

TR000033 Canon Klystron E3730A Inspection Sheet SN 20L106

HIGH POWER PULSE KLYSTRON
E3730A S/N 20L106

CANON ELECTRON TUBES & DEVICES CO., LTD.

TEST CLASSIFICATION							APPLIED SPECIFICATION				PRODUCT SPECIFICATION		
AQL	n1	d1	n1+n2	d1+d2	JUDGE	INSPECTION SHEET							
APPEARANCE						TYPE HIGH POWER PULSE KLYSTRON E3730A	SUPPLY QUANTITY			1	DATE OF INSP.	20-Nov-2020	
PRODUCTION							CHIEF OF INSPECTION SECTION			Y. Tanaka			
DESIGN													
TEST CONDITION ELECTROMAGNET VT-68922													
ITEM SYMBOL UNIT	STATIC			DYNAMIC								JUDGE	
	VACUUM CHECK	HEATER CURRENT	BEAM CURRENT	OUTPUT POWER	BEAM VOLTAGE	BEAM CURRENT	DRIVE POWER	GAIN	EFFICIENCY	PERVEANCE	X-ray Leakage		
	lion [μA]	If [A]	ik [A]	po [MW]	epy [kV]	ik [A]	pd [W]	Gp [dB]	η [%]	G [μA/V ^{1.5}]	[μSv/h]		
CONDITION	No operating voltage	Ef=14.5[V] (Ef ≤ 20[V])	Ef=14.5[V] epy=310[kV] tp(epy)=6.2[μs] fp=50[pps]	Ef=14.5[V] fo = 2856 [MHz] , tp(rf) = 4.0 [μs] , tp(epy) = 6.2 [μs] , fp = 50 [pps] Isol = (18.8, 30.2, 14.6, 17.1, 12.6, 4.8) [A]									
No.													
20L106	0.01	16.5	367	50.8	316	379	209	53.8	42.4	2.14	9.9		
SPEC	MIN.	-	-	345.2	50	-	-	-	50	42	1.95	-	INSPECTOR
	PAR	-	-	-	-	-	-	-	-	-	2.1	-	Mshibazaki
	MAX.	4.0	20	379.8	-	320	-	500	-	-	2.2	20	

TYPE E3730A series

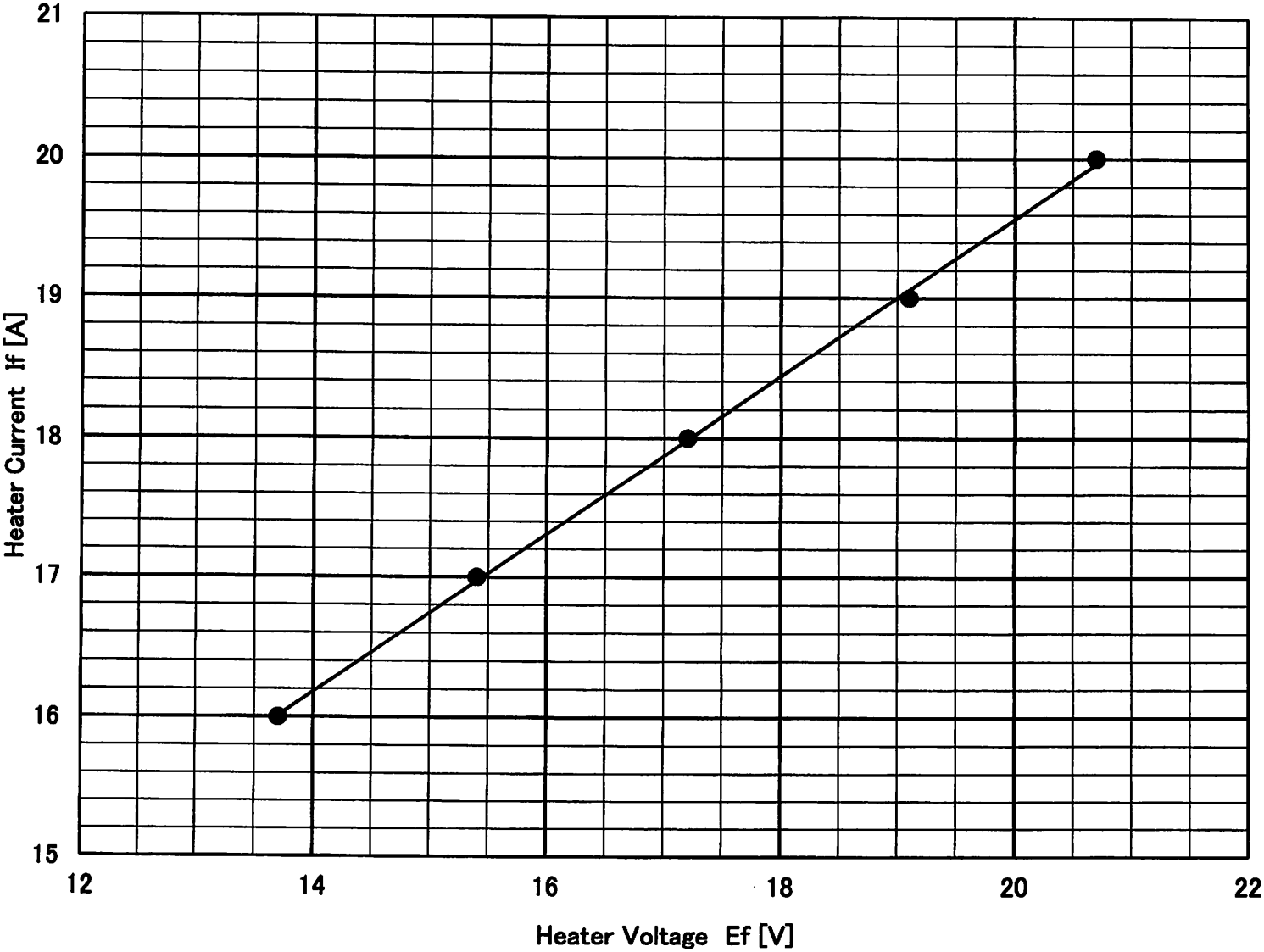
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TEST CLASSIFICATION	AQL	n1	d1	n1+n2	d1+d2	JUDGE	<h3 style="text-align: center;">INSPECTION SHEET</h3> <p>TYPE HIGH POWER PULSE KLYSTRON E3730A</p>	APPLIED SPECIFICATION	PRODUCT SPECIFICATION		
APPEARANCE								SUPPLY QUANTITY	1	DATE OF INSP.	20-Nov-2020
PRODUCTION								CHIEF OF INSPECTION SECTION	<i>Y. Tanaka</i>		
DESIGN											
TEST CONDITION											
ITEM	HYDROSTATIC PRESSURE		OUTLINE DIMENSION						JUDGE		
SYMBOL	-										
UNIT	-										
CONDITION	P = 0.98 [MPa] (10 [kgf/cm ²]) t = 15 min.		-								
No.											
20L106	OK		OK						OK		
SPEC.	MIN.	No visible leaks		No detectable						INSPECTOR	
	PAR	and no damages		change in the ion						<i>M. Shibazaki</i>	
	MAX.			pump indicator							

TYPE E3730A series

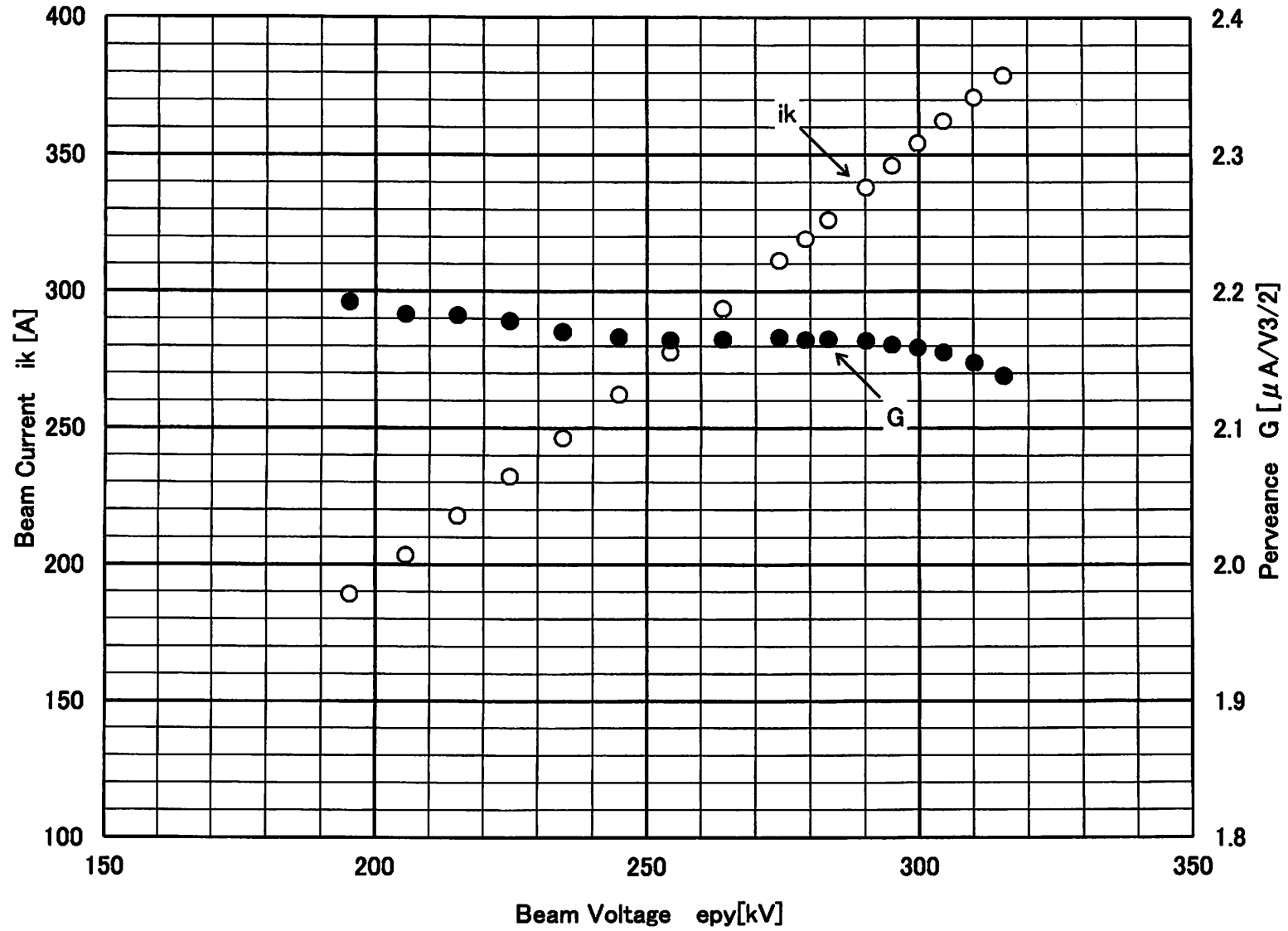
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E3730A S/N 20L106 HEATER CHARACTERISTICS



E3730A S/N 20L106 epy-ik CHARACTERISTICS

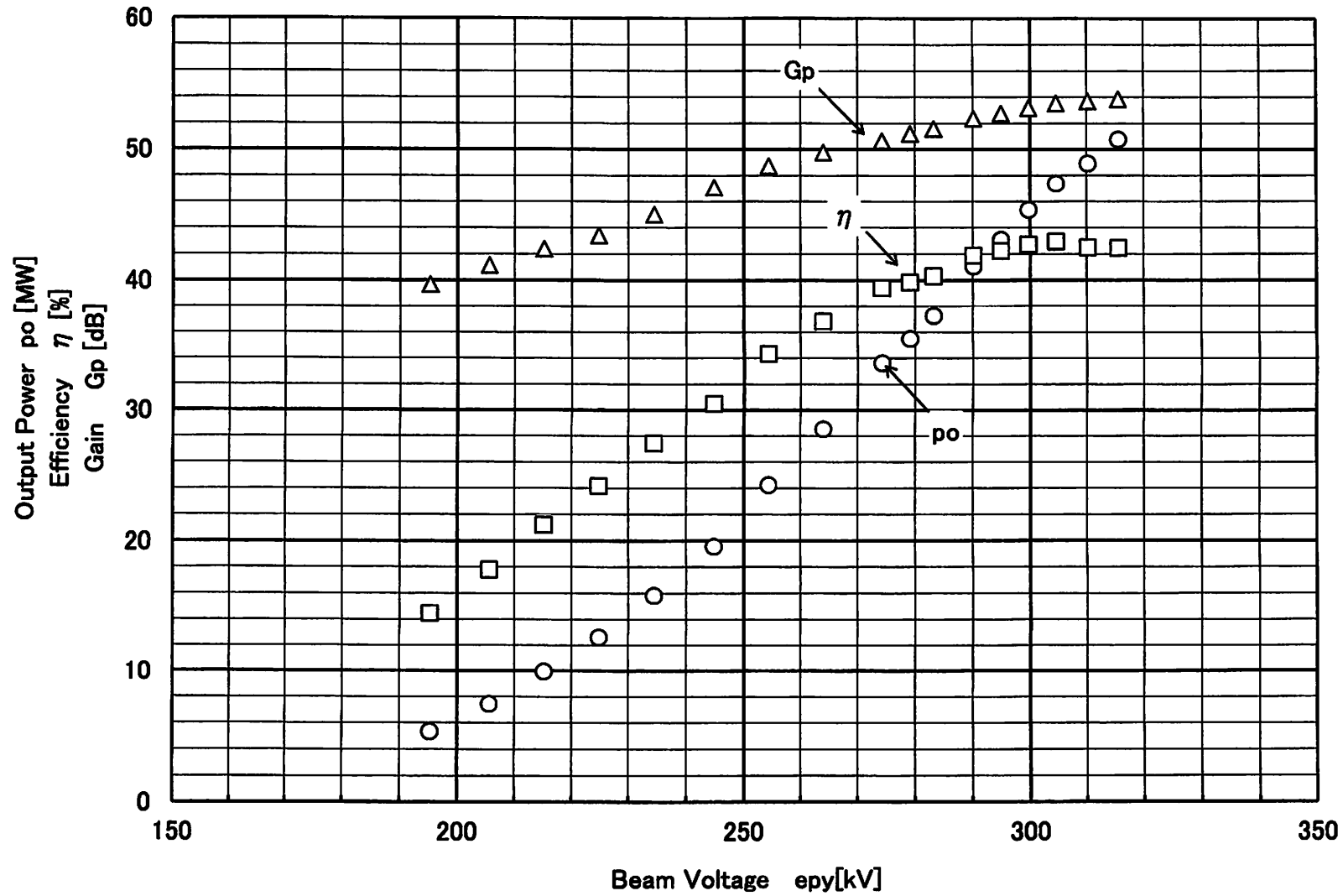
tp(epy) = 6.2 [μ s], prr = 50 [pps]



E3730A S/N 20L106 SATURATED OUTPUT CHARACTERISTICS (1)

$t_p(\text{rf}) = 4.0 \text{ } [\mu\text{s}]$, $p_{rr} = 50 \text{ [pps]}$,

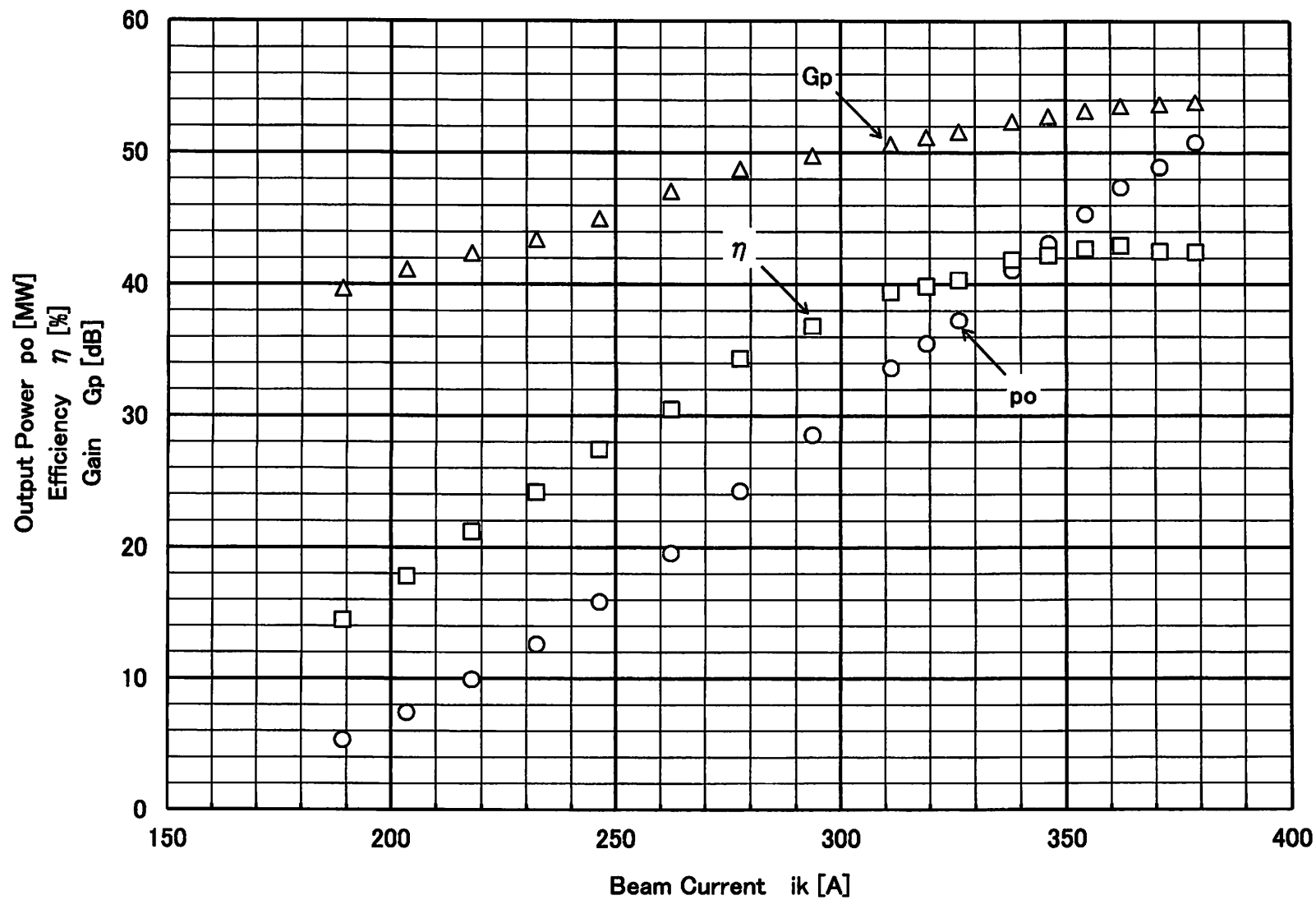
$I_{\text{sol}} = (18.8 , 30.2 , 14.6 , 17.1 , 12.6 , 4.8) \text{ [A]}$



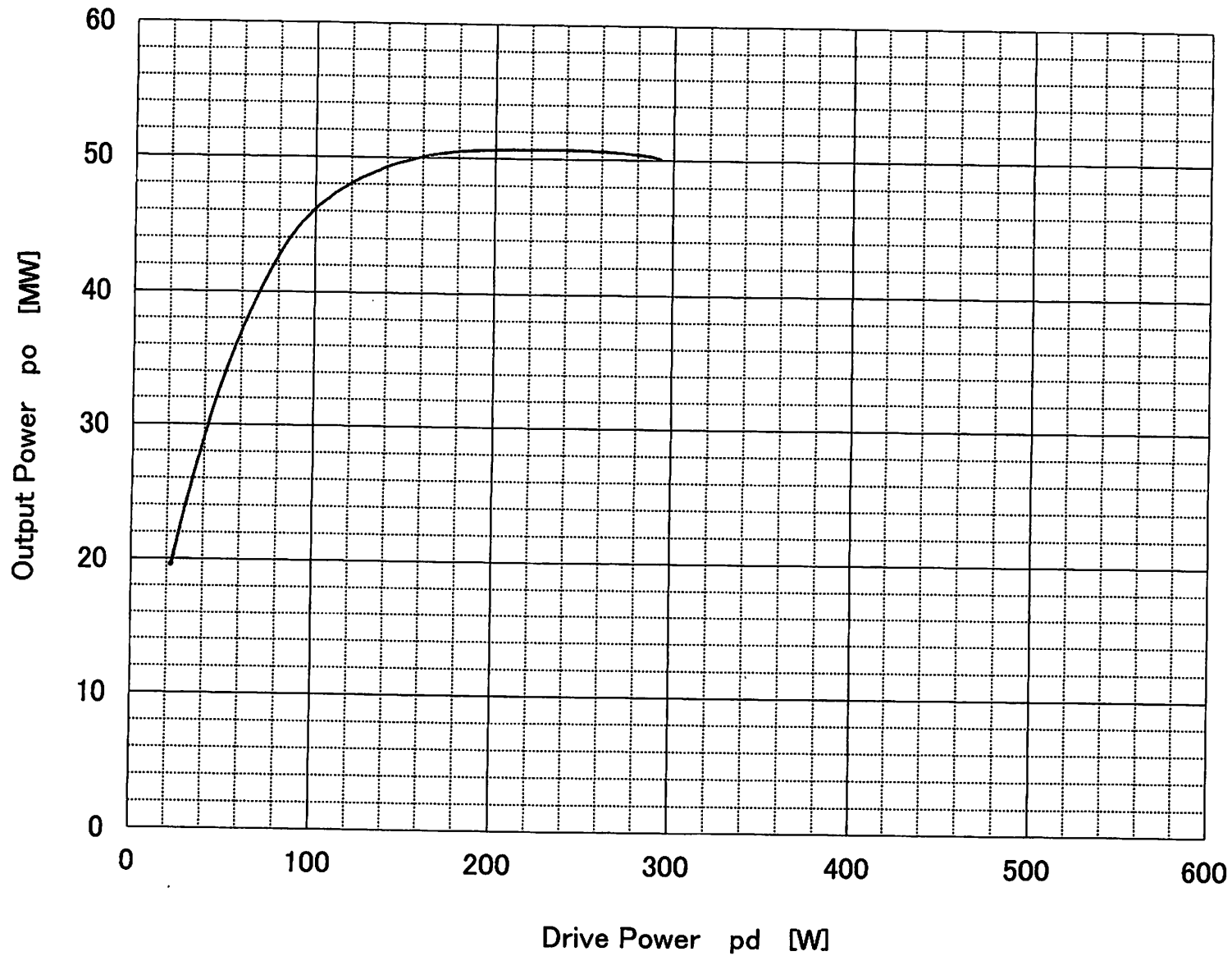
E3730A S/N 20L106 SATURATED OUTPUT CHARACTERISTICS (2)

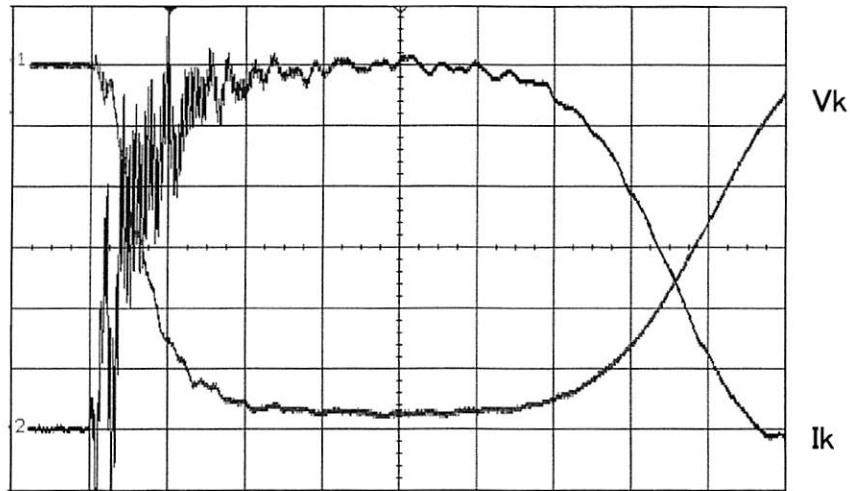
$t_p(\text{rf}) = 4.0 \text{ } [\mu\text{s}]$, $\text{prf} = 50 \text{ [pps]}$,

$I_{\text{sol}} = (18.8 , 30.2 , 14.6 , 17.1 , 12.6 , 4.8) \text{ [A]}$

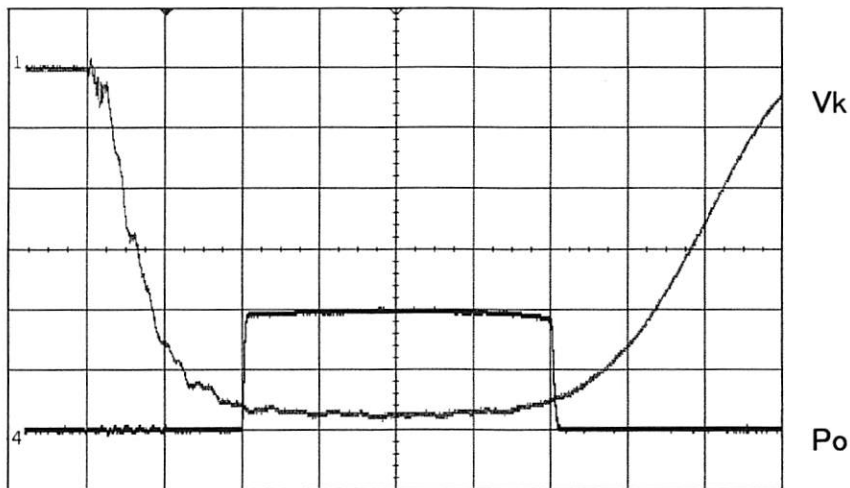


E3730A S/N 20L106 POWER TRANSFER CHARACTERISTICS
tp(rf) = 4.0 [μ s], prr = 50 [pps], epy = 316 [kV] ik = 379 [A],
Isol = (18.8 , 30.2 , 14.6 , 17.1 , 12.6 , 4.8) [A]

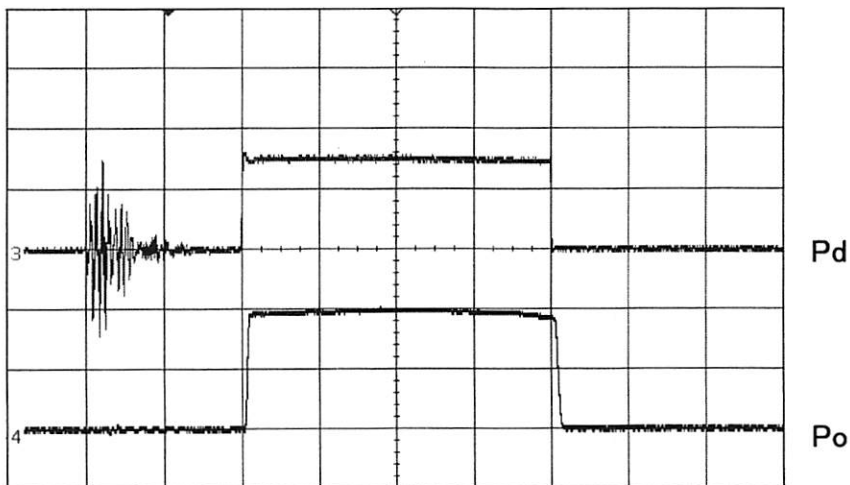




Beam Voltage V_k and Cathode Current I_k
 (X-axis: $1[\mu\text{s}/\text{div.}]$, $e_{py}=316[\text{kV}]$, $i_k=379[\text{A}]$)



Beam Voltage V_k and Output Power P_o
 (X-axis: $1[\mu\text{s}/\text{div.}]$, $e_{py}=316[\text{kV}]$, $p_o=50.8[\text{MW}]$)



Drive Power P_d and Output Power P_o
 (X-axis: $1[\mu\text{s}/\text{div.}]$, $p_d=209[\text{W}]$, $p_o=50.8[\text{MW}]$)