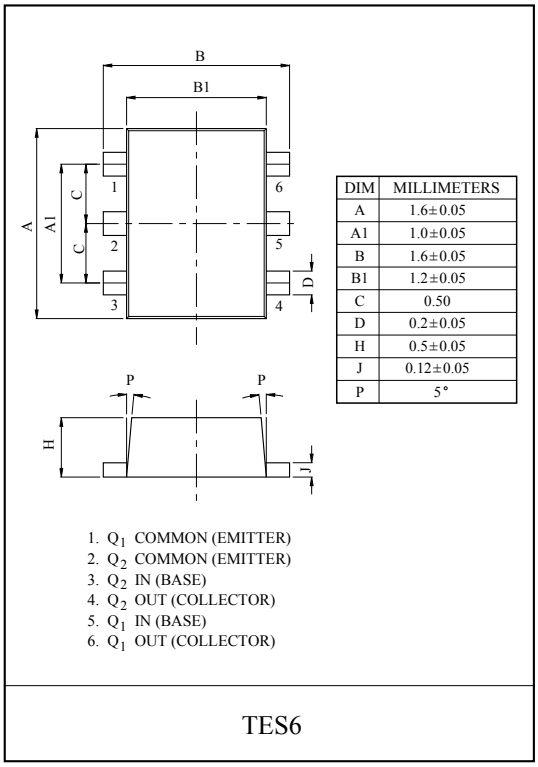
KRA727E~KRA729E

EPITAXIAL PLANAR PNP TRANSISTOR

SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- High Packing Density.

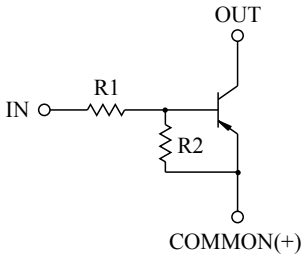


DIM	MILLIMETERS
A	1.6±0.05
A1	1.0±0.05
B	1.6±0.05
B1	1.2±0.05
C	0.50
D	0.2±0.05
H	0.5±0.05
J	0.12±0.05
P	5°

1. Q_1 COMMON (EMITTER)
2. Q_2 COMMON (EMITTER)
3. Q_2 IN (BASE)
4. Q_2 OUT (COLLECTOR)
5. Q_1 IN (BASE)
6. Q_1 OUT (COLLECTOR)

TES6

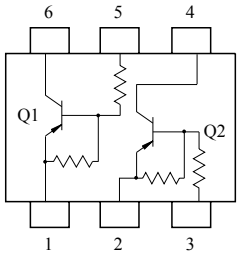
EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(kΩ)	R2(kΩ)
KRA727E	10	47
KRA728E	22	47
KRA729E	47	22

EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25℃)

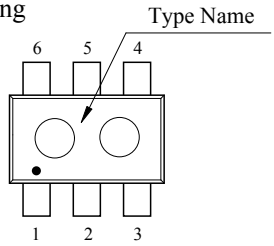
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA727E~729E	V_O	-50	V
Input Voltage	KRA727E	V_I	-30, 6	V
	KRA728E		-40, 7	
	KRA729E		-40, 15	
Output Current	KRA727E~729E	I_O	-100	mA
Power Dissipation		P_D*	200	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55~150	℃

* Total Rating.

MARK SPEC

TYPE	KRA727E	KRA728E	KRA729E
MARK	JH	JI	JJ

Marking

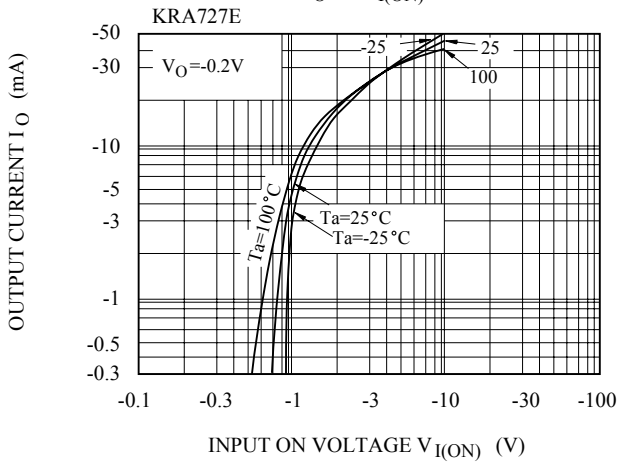


ELECTRICAL CHARACTERISTICS (Ta=25℃)

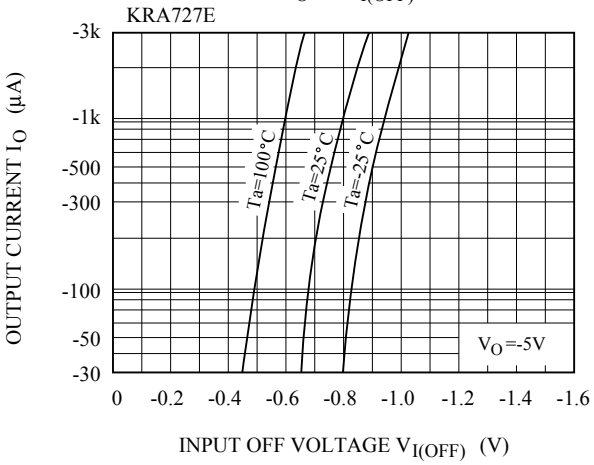
CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current		KRA727E～729E	$I_{O(OFF)}$	V_O=-50V, V_I=0	-	-	-500	nA
DC Current Gain		KRA727E	G_I	V_O=-5V, I_O=-10mA	80	150	-	
		KRA728E			80	150	-	
		KRA729E			70	140	-	
Output Voltage		KRA727E～729E	$V_{O(ON)}$	I_O=-10mA, I_I=-0.5mA	-	-0.1	-0.3	V
Input Voltage (ON)		KRA727E	$V_{I(ON)}$	V_O=-0.2V, I_O=-5mA	-	-1.2	-1.8	V
		KRA728E			-	-1.8	-2.6	
		KRA729E			-	-3.0	-5.8	
Input Votlage (OFF)		KRA727E	$V_{I(OFF)}$	V_O=-5V, I_O=-0.1mA	-0.5	-0.75	-	V
		KRA728E			-0.6	-0.88	-	
		KRA729E			-1.5	-1.82	-	
Transition Frequency		KRA727E～729E	f_T *	V_O=-10V, I_O=-5mA	-	200	-	MHz
Input Current		KRA727E	I_I	V_I=-5V	-	-	-0.88	mA
		KRA728E			-	-	-0.36	
		KRA729E			-	-	-0.16	
Switching Time	Rise Time	KRA727E	t_r	V_O=-5V, V_{IN}=-5V, R_L=1kΩ	-	0.07	-	μS
		KRA728E			-	0.20	-	
		KRA729E			-	0.38	-	
	Storage Time	KRA727E	t_{stg}		-	1.1	-	
		KRA728E			-	1.3	-	
		KRA729E			-	0.7	-	
	Fall Time	KRA727E	t_f		-	0.35	-	
		KRA728E			-	0.4	-	
		KRA729E			-	0.48	-	

Note : * Characteristic of Transistor Only.

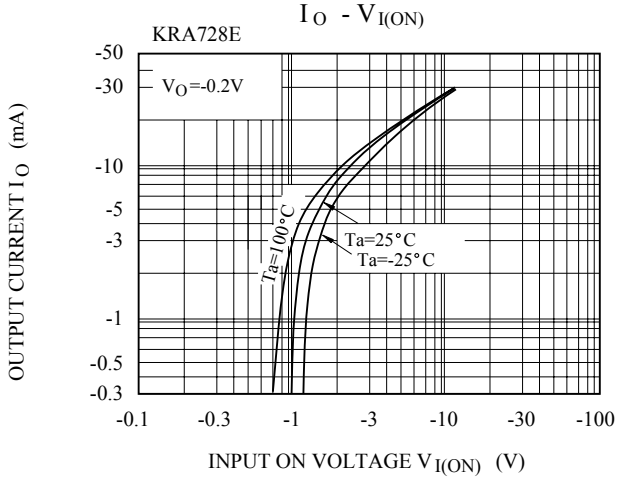
I_O - $V_{I(ON)}$



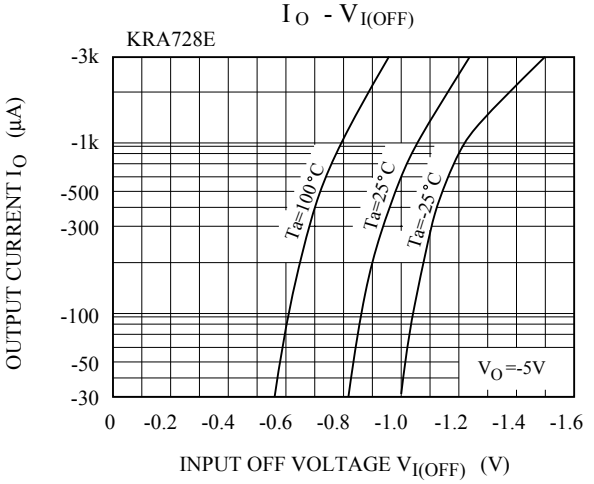
I_O - $V_{I(OFF)}$



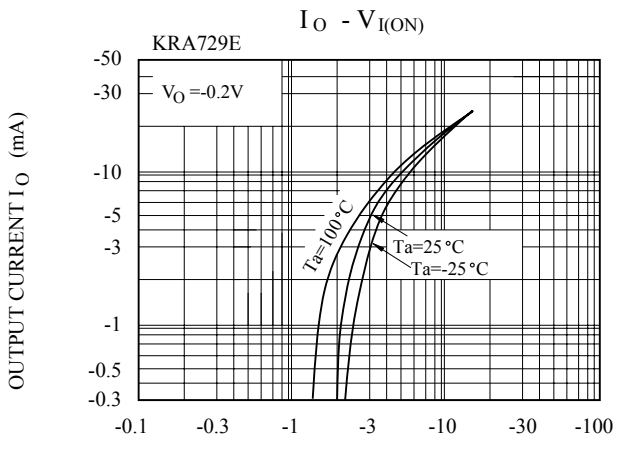
I_O - $V_{I(ON)}$



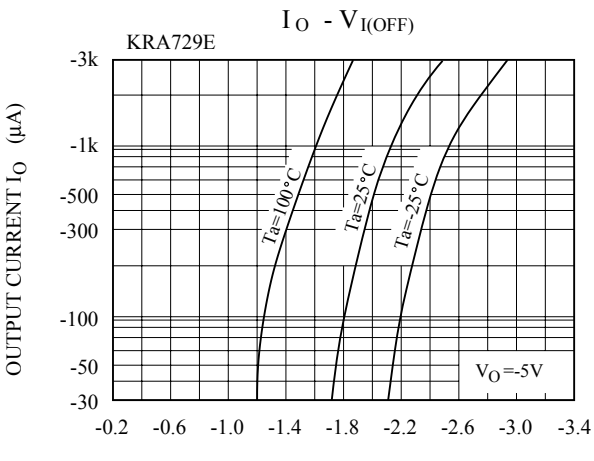
I_O - $V_{I(OFF)}$



I_O - $V_{I(ON)}$

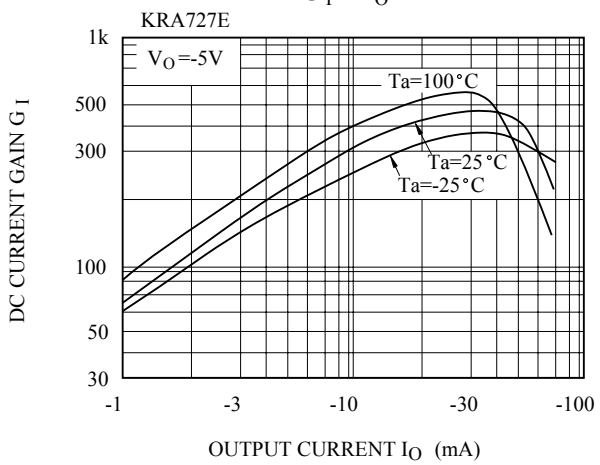


I_O - $V_{I(OFF)}$



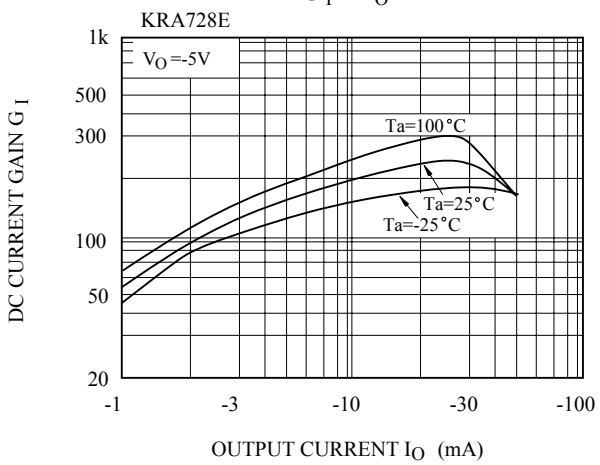
G_I - I_O

KRA727E



G_I - I_O

KRA728E



G_I - I_O

KRA729E