

KEC

SEMICONDUCTOR
TECHNICAL DATA

KRA736E~KRA742E

EPITAXIAL PLANAR PNP TRANSISTOR

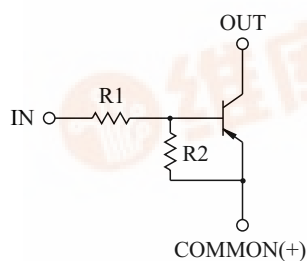
SWITCHING APPLICATION.

INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

FEATURES

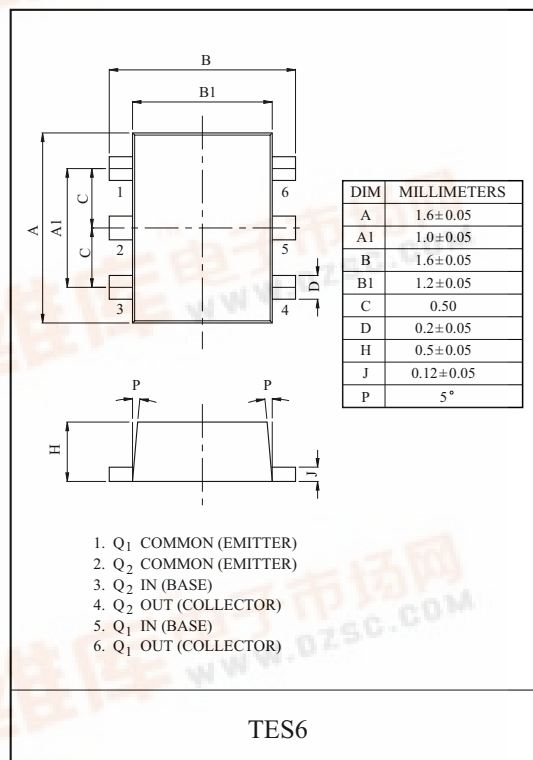
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT

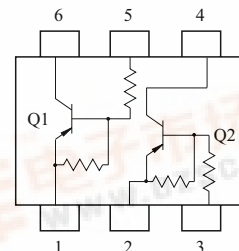


BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRA736E	1	10
KRA737E	2.2	2.2
KRA738E	2.2	10
KRA739E	4.7	10
KRA740E	10	4.7
KRA741E	47	10
KRA742E	100	100



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRA736E ~742E	V _O	-50	V
Input Voltage	KRA736E	V _I	-10, 5	V
	KRA737E		-12, 10	
	KRA738E		-12, 5	
	KRA739E		-20, 7	
	KRA740E		-30, 10	
	KRA741E		-40, 15	
	KRA742E		-40, 10	
Output Current	KRA736E ~742E	I _O	-100	mA
Power Dissipation		P _D *	200	mW
Junction Temperature		T _j	150	℃
Storage Temperature Range		T _{stg}	-55 ~ 150	℃

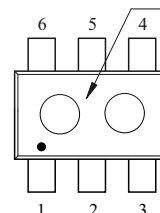
*: Total Rating.

MARK SPEC

TYPE	KRA736E	KRA737E	KRA738E	KRA739E	KRA740E	KRA741E	KRA742E
MARK	J2	J4	J5	J6	J7	J8	J9

Marking

Type Name



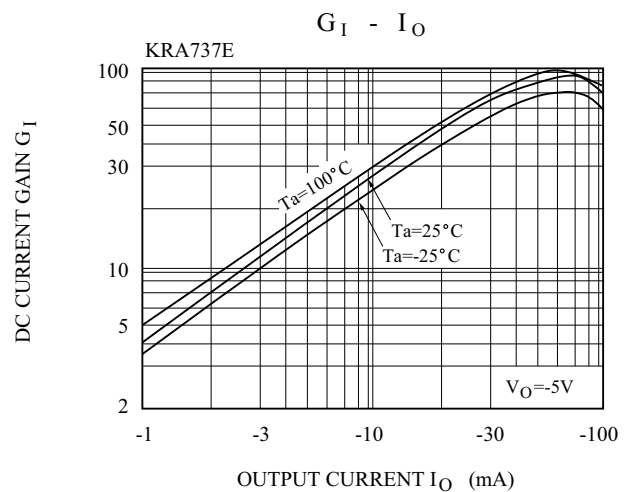
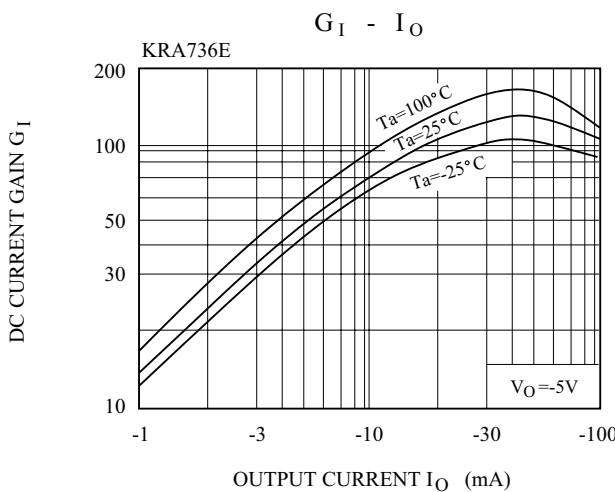
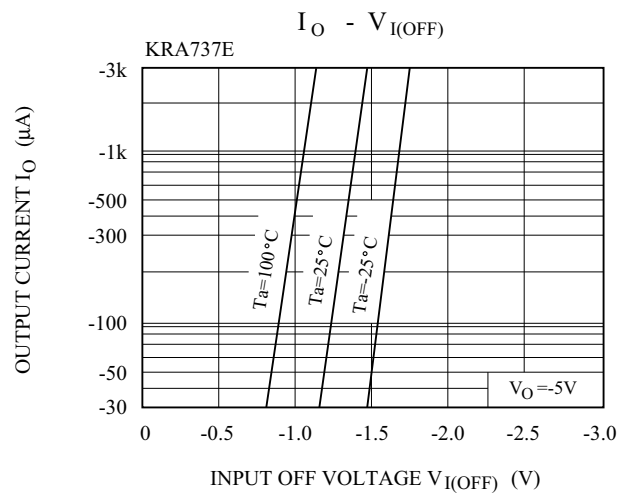
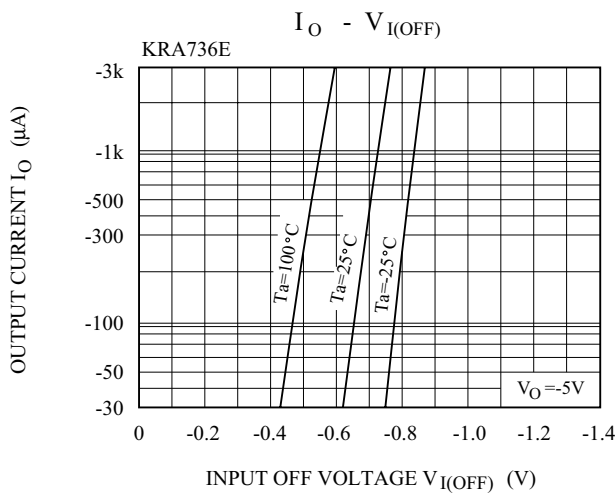
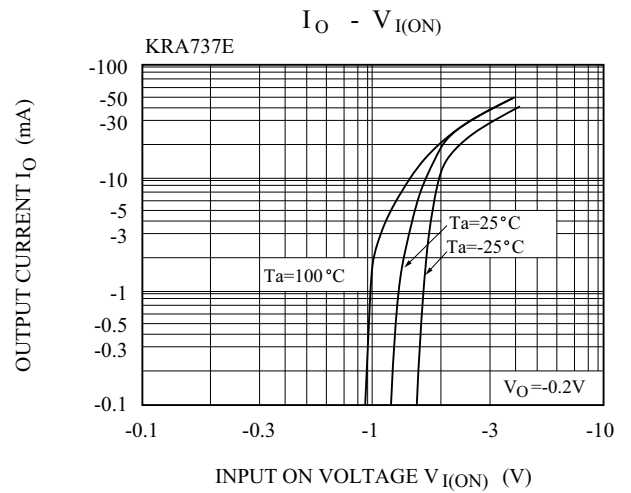
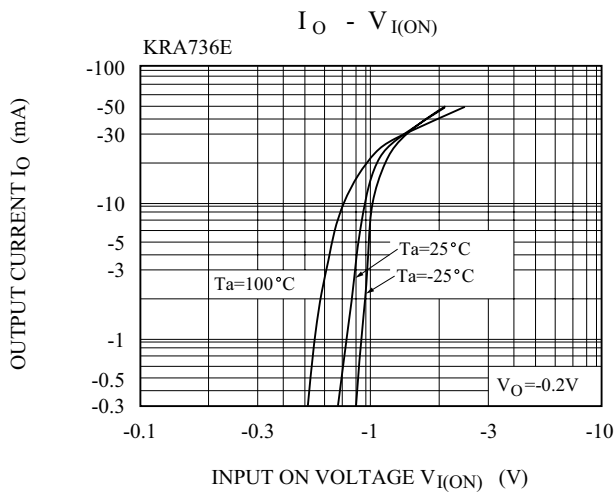
KRA736E~KRA742E

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

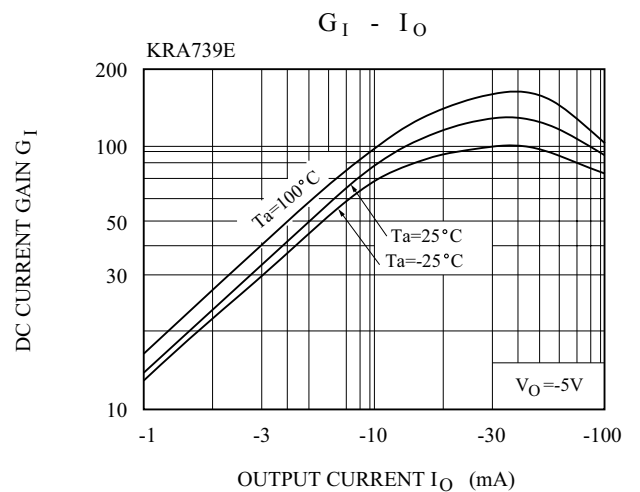
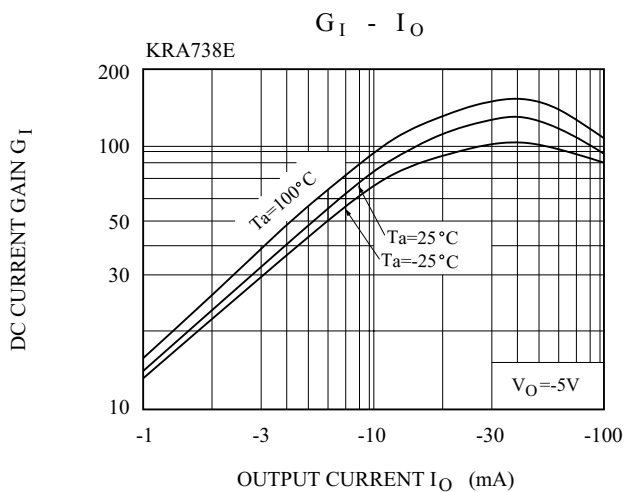
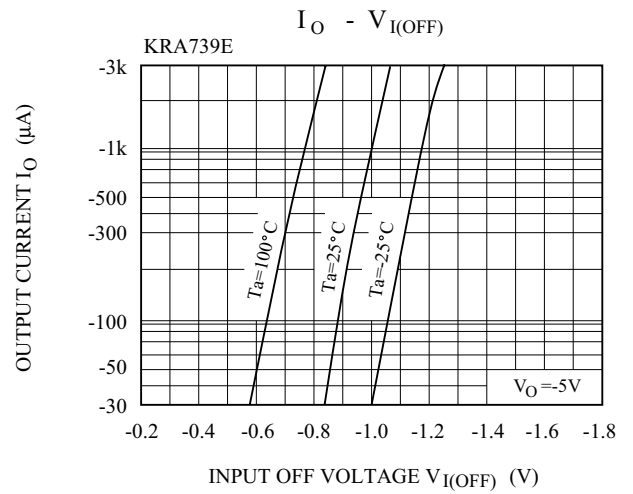
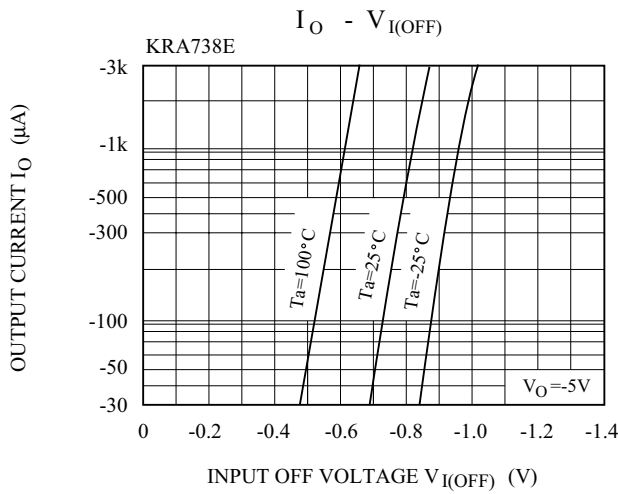
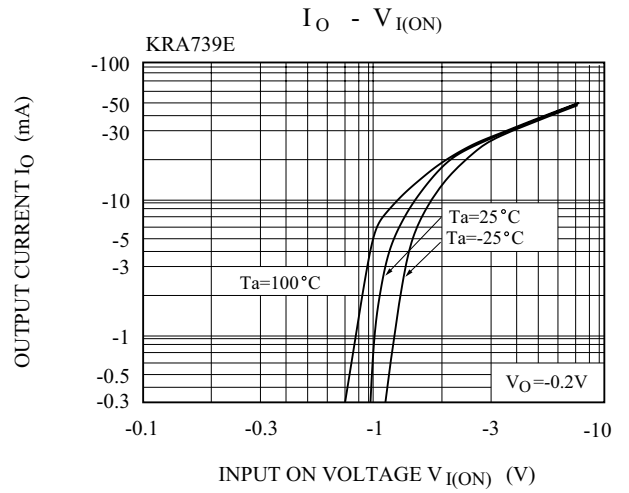
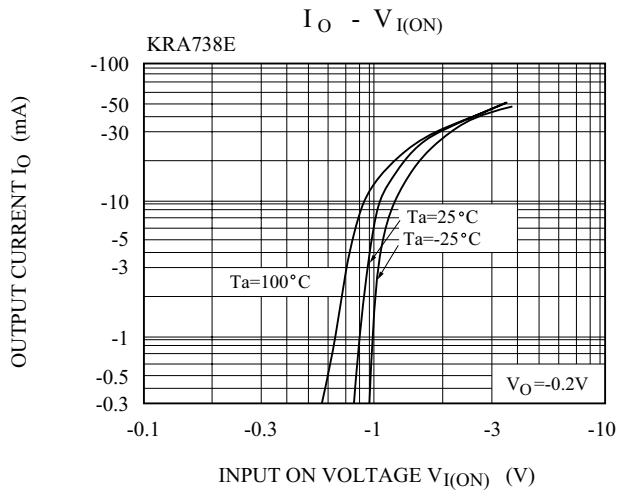
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRA736E ~ 742E	$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA
DC Current Gain	KRA736E	G_I	$V_O=-5V, I_O=-5mA$	33	-	-	
	KRA737E		$V_O=-5V, I_O=-20mA$	20	-	-	
	KRA738E		$V_O=-5V, I_O=-10mA$	33	-	-	
	KRA739E		$V_O=-5V, I_O=-10mA$	30	-	-	
	KRA740E		$V_O=-5V, I_O=-10mA$	24	-	-	
	KRA741E		$V_O=-5V, I_O=-5mA$	33	-	-	
	KRA742E		$V_O=-5V, I_O=-5mA$	62	-	-	
Output Voltage	KRA736E	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-	-0.3	V
	KRA737E		$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	
	KRA738E		$I_O=-10mA, I_I=-0.5mA$	-	-	-0.3	
	KRA739E		$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	
	KRA740E		$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	
	KRA741E		$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	
	KRA742E		$I_O=-5mA, I_I=-0.25mA$	-	-0.1	-0.3	
Input Voltage (ON)	KRA736E	$V_{I(ON)}$	$V_O=-0.3V, I_O=-20mA$	-	-0.98	-3	V
	KRA737E		$V_O=-0.3V, I_O=-20mA$	-	-1.83	-3	
	KRA738E		$V_O=-0.3V, I_O=-20mA$	-	-1.22	-3	
	KRA739E		$V_O=-0.3V, I_O=-20mA$	-	-1.76	-2.5	
	KRA740E		$V_O=-0.3V, I_O=-2mA$	-	-2	-3	
	KRA741E		$V_O=-0.3V, I_O=-2mA$	-	-3.9	-5	
	KRA742E		$V_O=-0.3V, I_O=-1mA$	-	-1.64	-3	
Input Voltage (OFF)	KRA736E	$V_{I(OFF)}$	$V_{CC}=-5V, I_O=-100\mu A$	-0.3	-0.63	-	V
	KRA737E			-0.5	-1.15	-	
	KRA738E			-0.3	-0.67	-	
	KRA739E			-0.3	-0.82	-	
	KRA740E			-0.8	-1.68	-	
	KRA741E			-1	-3.09	-	
	KRA742E			-0.5	-1.17	-	
Transition Frequency	KRA736E ~ 742E	f_T^*	$V_O=-10V, I_O=-5mA$	-	250	-	MHz
Input Current	KRA736E	I_I	$V_I=-5V$	-	-	-7.2	mA
	KRA737E			-	-	-3.8	
	KRA738E			-	-	-3.8	
	KRA739E			-	-	-1.8	
	KRA740E			-	-	-0.88	
	KRA741E			-	-	-0.16	
	KRA742E			-	-	-0.15	

Note : * Characteristic of Transistor Only.

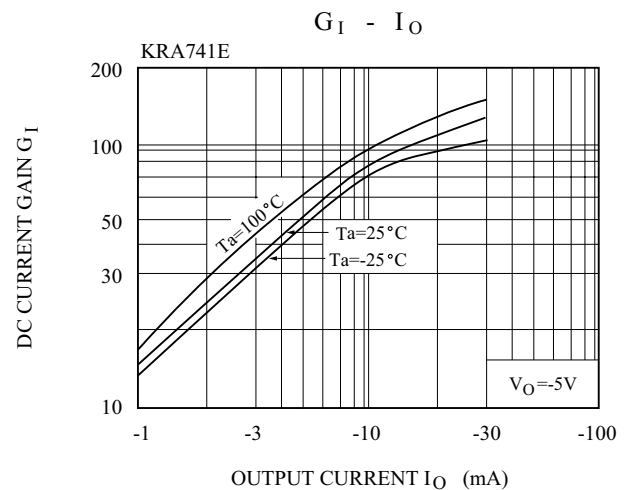
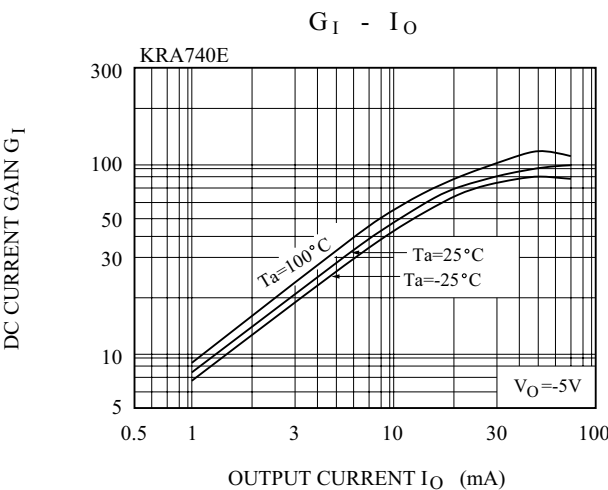
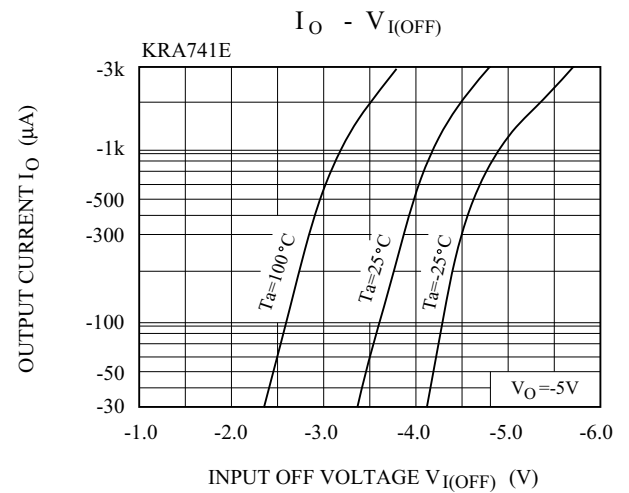
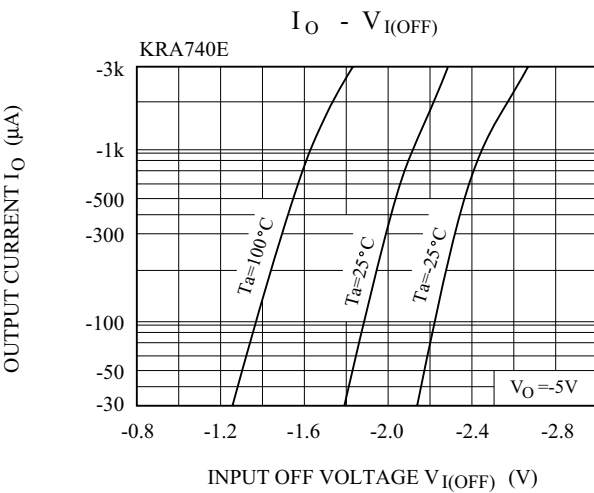
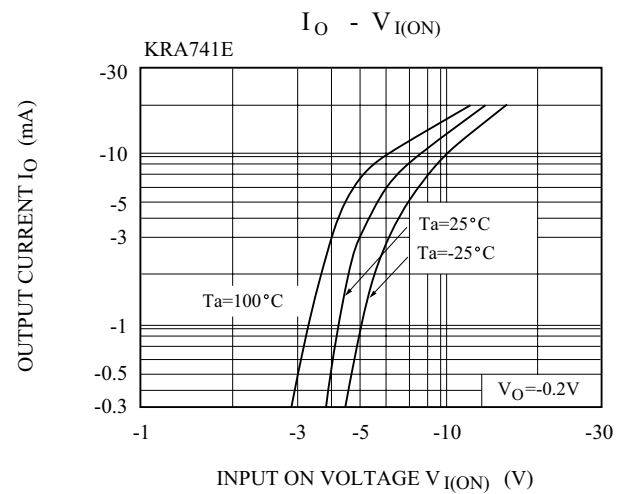
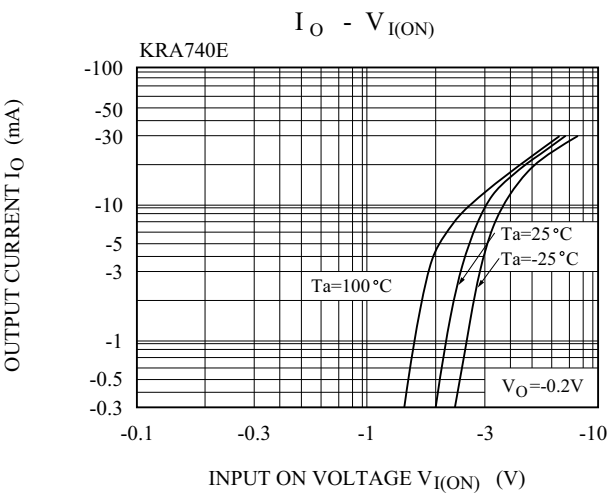
KRA736E~KRA742E



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