



SEMICONDUCTOR TECHNICAL DATA

KRC841T~KRC846T

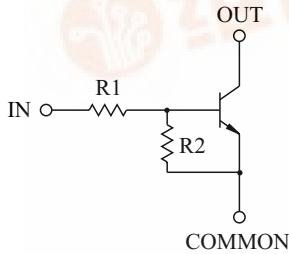
EPITAXIAL PLANAR NPN TRANSISTOR

HIGH CURRENT SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

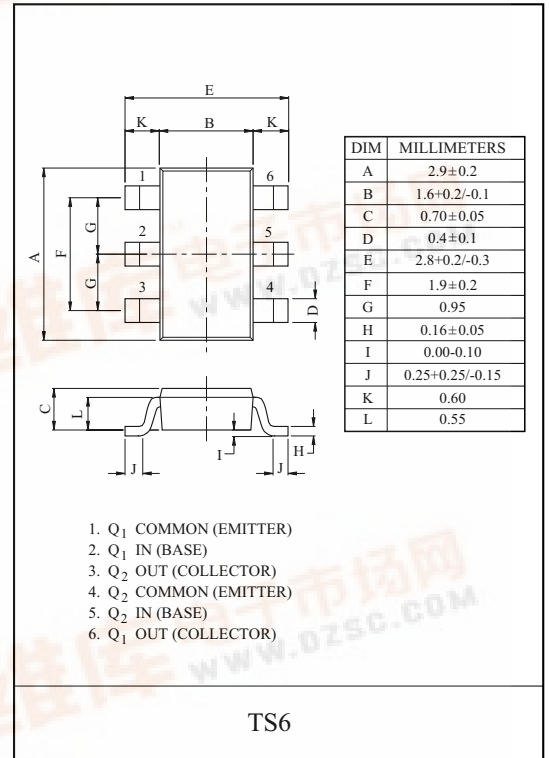
FEATURES

- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Output Current : 800mA.

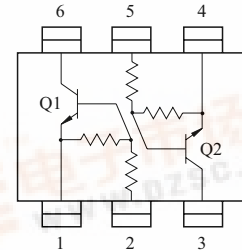
EQUIVALENT CIRCUIT



TYPE NO.	R1 (kΩ)	R2 (kΩ)
KRC841T	1	1
KRC842T	2.2	2.2
KRC843T	4.7	4.7
KRC844T	10	10
KRC845T	1	10
KRC846T	2.2	10



EQUIVALENT CIRCUIT (TOP VIEW)

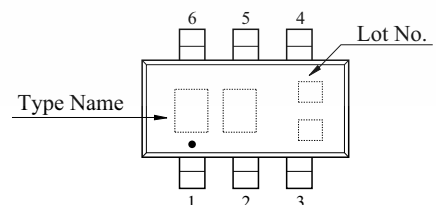


MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC841T~846T	V _O	50	V
Input Voltage	KRC841T	V _I	10, -10	V
	KRC842T		12, -10	
	KRC843T		20, -10	
	KRC844T		30, -10	
	KRC845T		10, -5	
	KRC846T		12, -6	
Output Current	KRC841T~846T	I _O	800	mA
Power Dissipation		P _D *	0.9	W
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55 ~ 150	°C

* Package mounted on a ceramic board (600mm² × 0.8mm)

Marking



MARK SPEC

TYPE	KRC841T	KRC842T	KRC843T	KRC844T	KRC845T	KRC846T
MARK	NA	NB	NC	ND	NE	NF



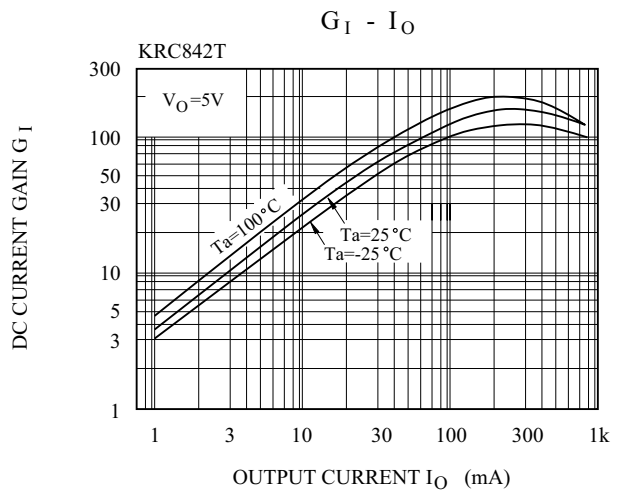
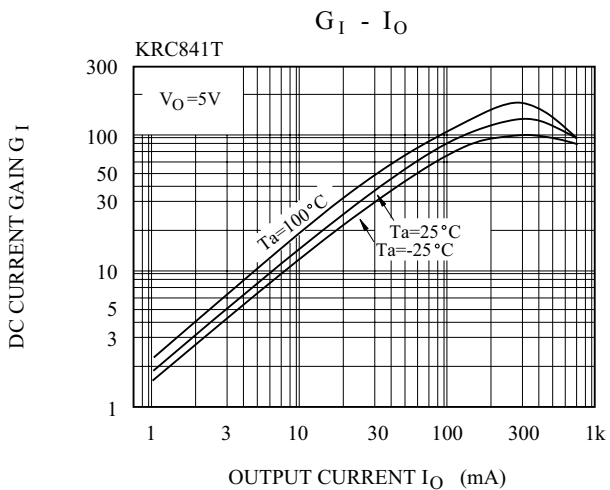
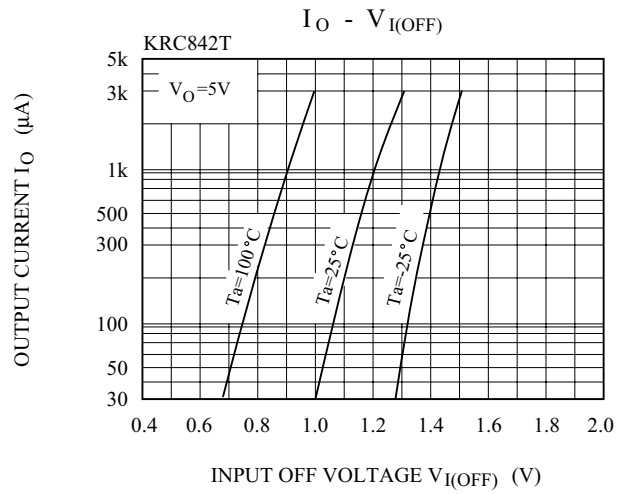
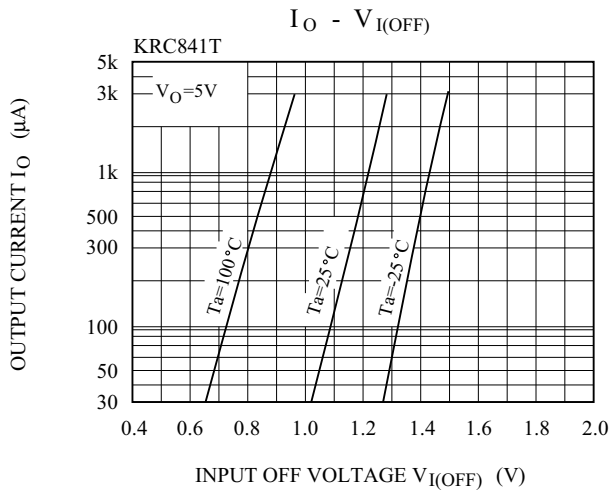
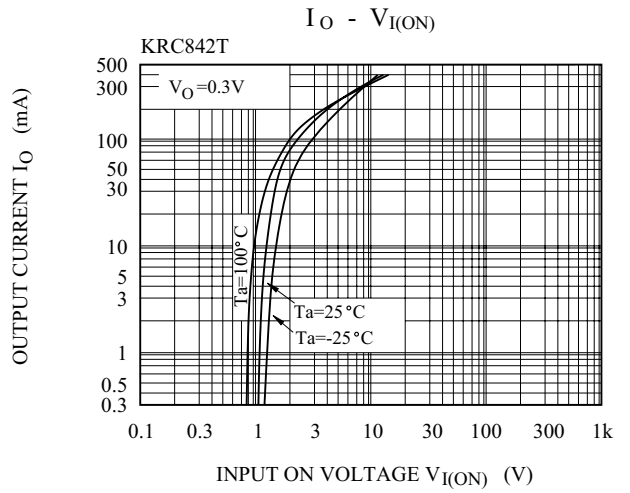
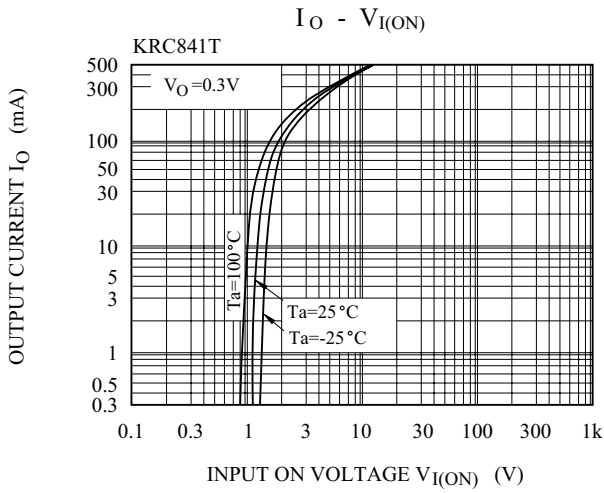
KRC841T~KRC846T

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

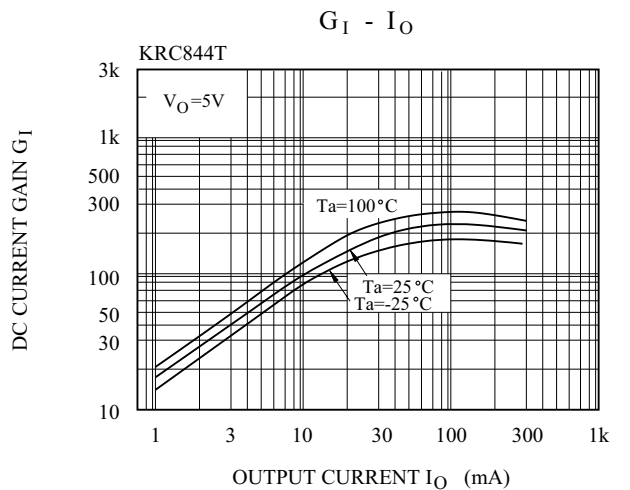
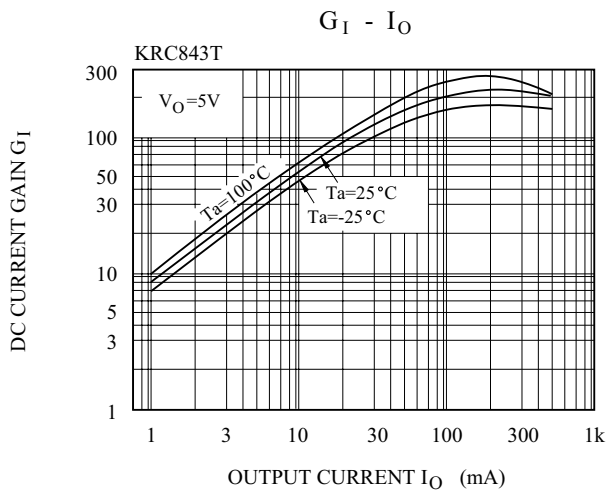
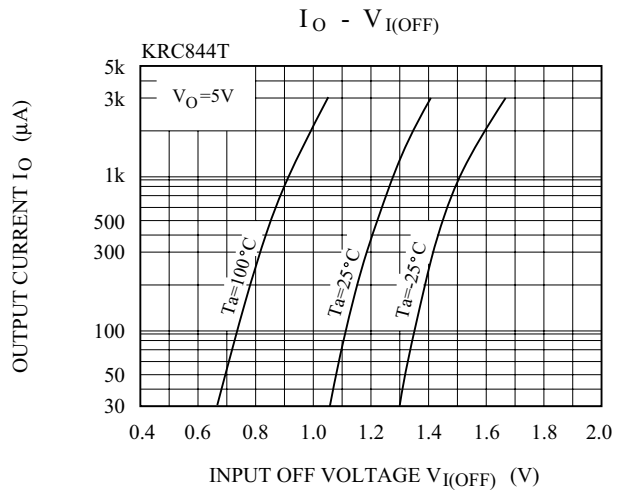
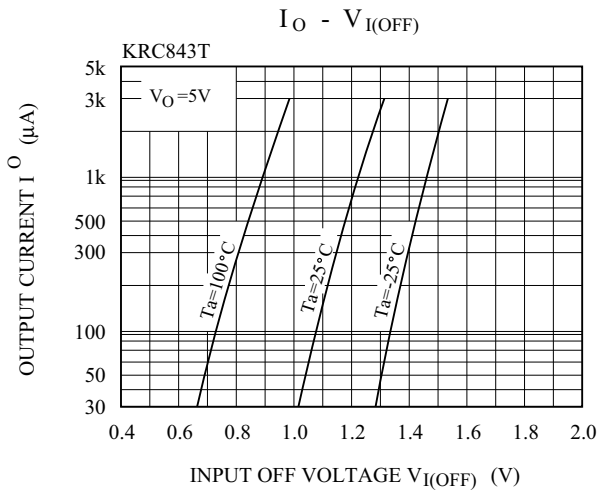
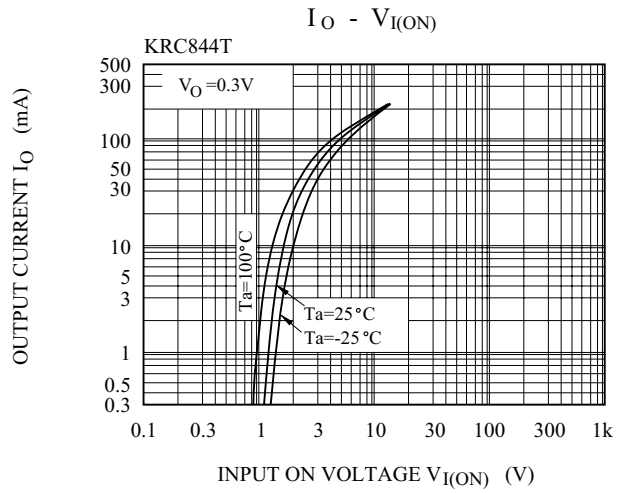
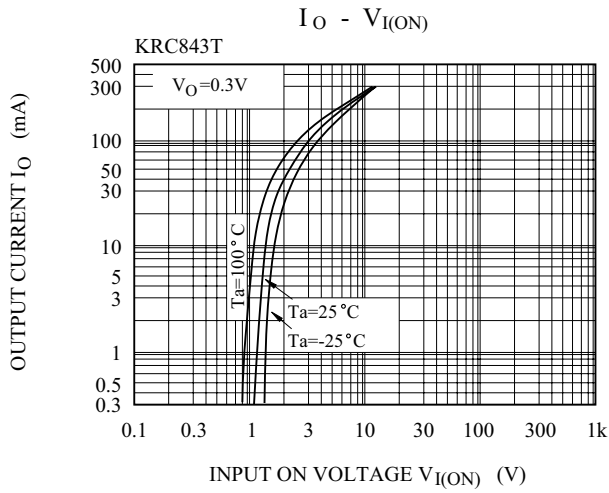
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC841T~846T	$I_{O(OFF)}$	$V_0=30V, V_1=0$	-	-	10	μA
DC Current Gain	KRC841T	G_I	$V_0=5V, I_0=50mA$	33	-	-	
	KRC842T			39	-	-	
	KRC843T			47	-	-	
	KRC844T			56	-	-	
	KRC845T			56	-	-	
	KRC846T			56	-	-	
Output Voltage	KRC841T~846T	$V_{O(ON)}$	$I_0=50mA, I_f=2.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC841T	$V_{I(ON)}$	$V_0=0.3V, I_0=20mA$	-	-	3.0	V
	KRC842T			-	-	3.0	
	KRC843T			-	-	3.0	
	KRC844T			-	-	3.0	
	KRC845T			-	-	3.0	
	KRC846T			-	-	2.0	
Input Voltage (OFF)	KRC841T~844T	$V_{I(OFF)}$	$V_0=5V, I_0=0.1mA$	0.5	-	-	V
	KRC845T~846T			0.3	-	-	
Transition Frequency	KRC841T~846T	f_T^*	$V_0=10V, I_0=5mA,$ $f=100MHz$	-	200	-	MHz
Input Current	KRC841T	I_I	$V_1=5V$	-	-	7.2	mA
	KRC842T			-	-	3.8	
	KRC843T			-	-	1.8	
	KRC844T			-	-	0.88	
	KRC845T			-	-	7.2	
	KRC846T			-	-	3.6	

Note : * Characteristic of Transistor Only.

KRC841T~KRC846T



KRC841T~KRC846T



KRC841T~KRC846T

