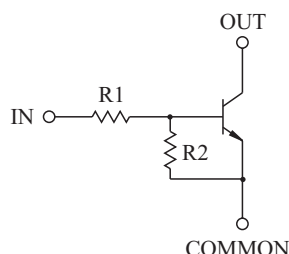


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

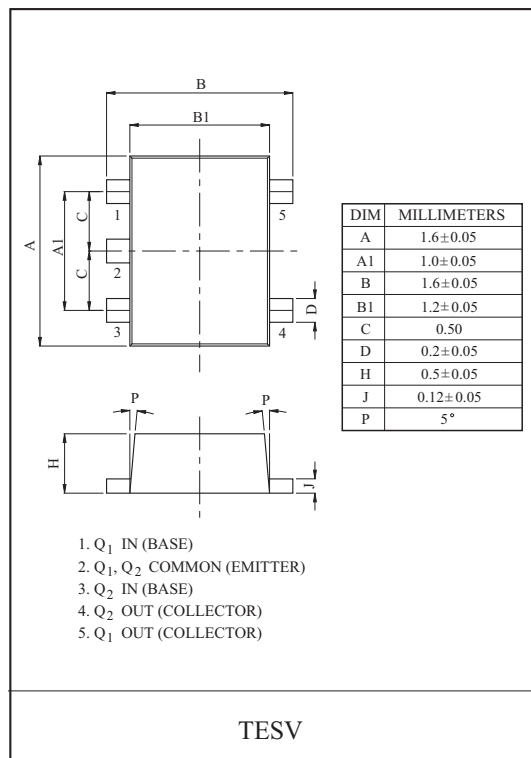
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.
- Suffix U : Qualified to AEC-Q101
ex) KRC657E-RTK/HU

EQUIVALENT CIRCUIT

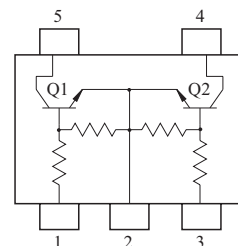


BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC657E	10	47
KRC658E	22	47
KRC659E	47	22



EQUIVALENT CIRCUIT (TOP VIEW)



MAXIMUM RATING (Ta=25 °C)

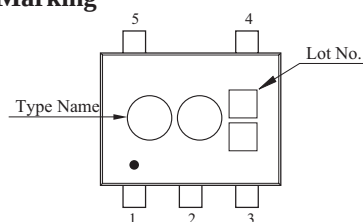
CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC657E 659E	V_O	50	V
Input Voltage	KRC657E	V_I	30, -6	V
	KRC658E		40, -7	
	KRC659E		40, -15	
Output Current	KRC657E 659E	I_O	100	mA
Power Dissipation		P_D^*	200	mW
Junction Temperature		T_j	-55~150	
Storage Temperature Range		T_{stg}	-55~150	

* Total Rating.

MARK SPEC

TYPE	KRC657E	KRC658E	KRC659E
MARK	NH	NI	NJ

Marking



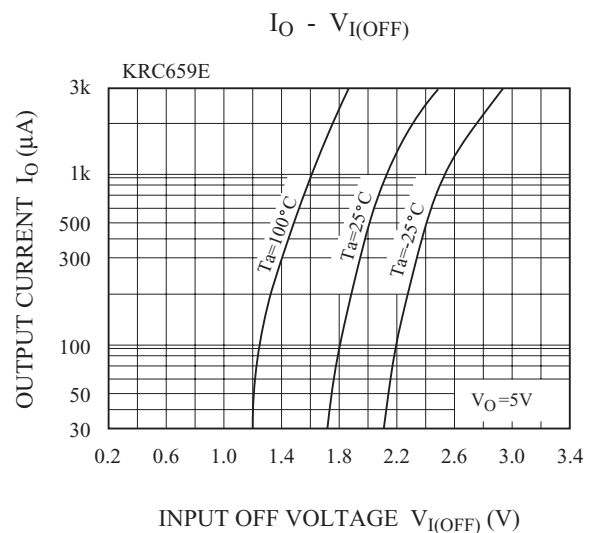
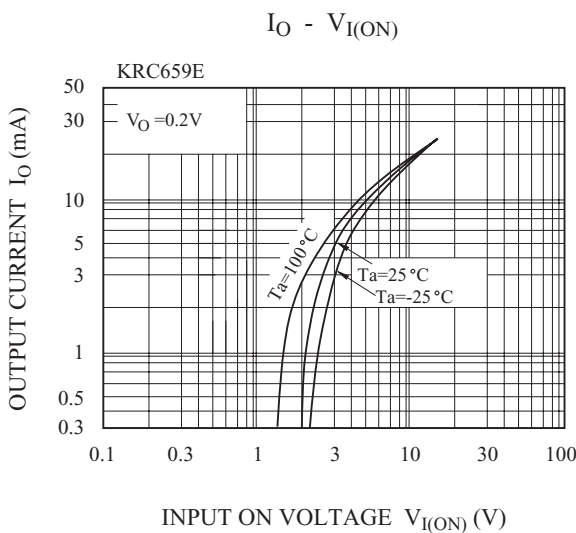
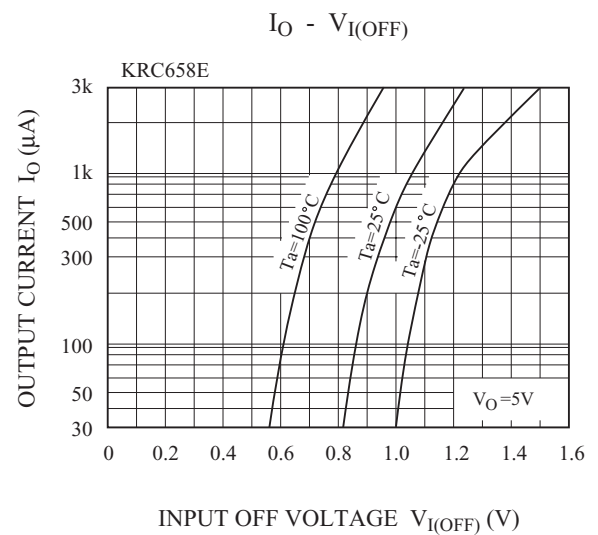
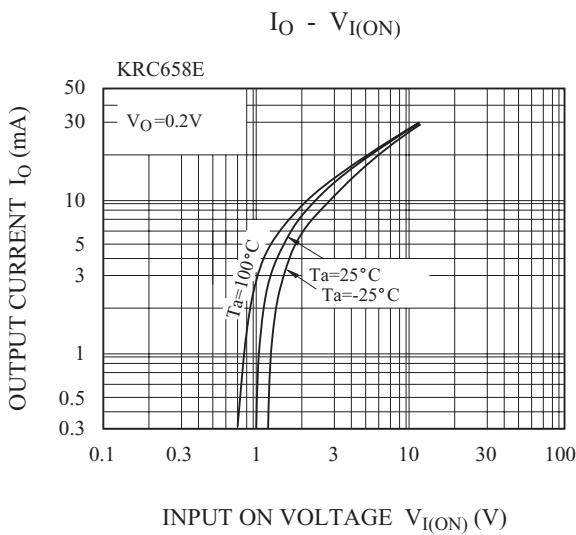
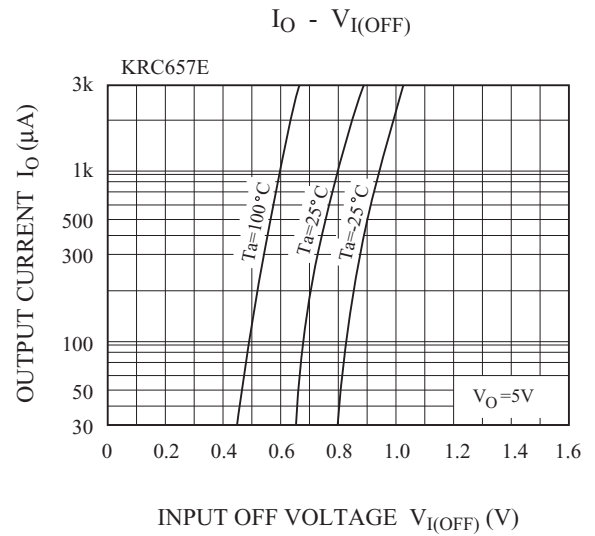
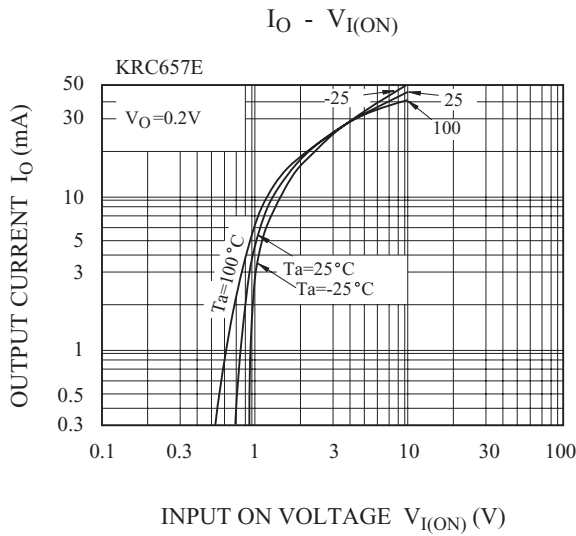
KRC657E~KRC659E

ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current		KRC657E 659E	I _{O(OFF)}	V _O =50V, V _I =0	-	-	500	nA
DC Current Gain		KRC657E	G _I	V _O =5V, I _O =10mA	80	150	-	
		KRC658E			80	150	-	
		KRC659E			70	140	-	
Output Voltage		KRC657E 659E	V _{O(ON)}	I _O =10mA, I _I =0.5mA	-	0.1	0.3	V
Input Voltage (ON)		KRC657E	V _{I(ON)}	V _O =0.2V, I _O =5mA	-	1.2	1.8	V
		KRC658E			-	1.8	2.6	
		KRC659E			-	3.0	5.8	
Input Votlage (OFF)		KRC657E	V _{I(OFF)}	V _O =5V, I _O =0.1mA	0.5	0.75	-	V
		KRC658E			0.6	0.88	-	
		KRC659E			1.5	1.82	-	
Transition Frequency		KRC657E 659E	f _T *	V _O =10V, I _O =5mA	-	200	-	MHz
Input Current		KRC657E	I _I	V _I =5V	-	-	0.88	mA
		KRC658E			-	-	0.36	
		KRC659E			-	-	0.16	
Switching Time	Rise Time	KRC657E	t _r	V _O =5V, V _{IN} =5V R _L =1kΩ	-	0.05	-	μs
		KRC658E			-	0.12	-	
		KRC659E			-	0.26	-	
	Storage Time	KRC657E	t _{stg}		-	2.0	-	
		KRC658E			-	2.4	-	
		KRC659E			-	1.5	-	
	Fall Time	KRC657E	t _f		-	0.36	-	
		KRC658E			-	0.4	-	
		KRC659E			-	0.41	-	
Input Resistor		KRC657E	R1	-	7	10	13	kΩ
		KRC658E			15.4	22	28.6	
		KRC659E			32.9	47	61.1	
Resistor Ratio		KRC657E	R2/R1	-	3.7	4.7	5.7	
		KRC658E			1.7	2.1	26	
		KRC659E			0.37	0.47	0.57	

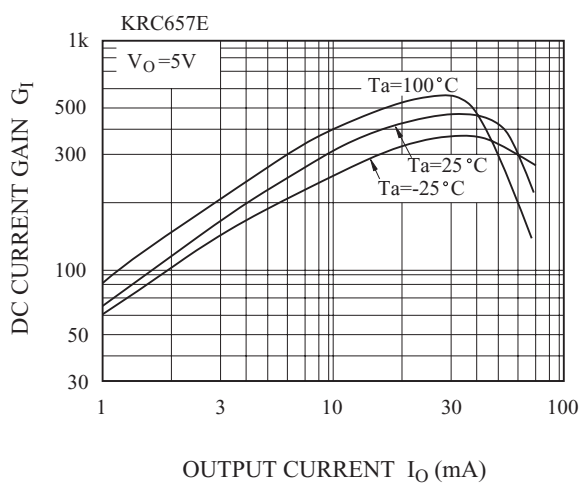
Note : * Characteristic of Transistor Only.

KRC657E~KRC659E

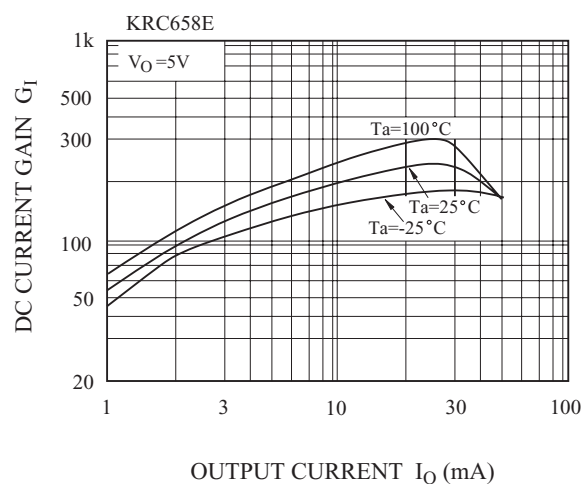


KRC657E~KRC659E

$G_I - I_O$



$G_I - I_O$



$G_I - I_O$

