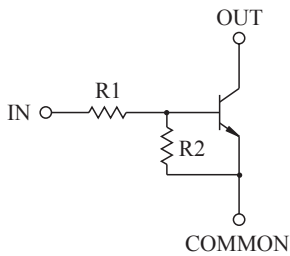


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

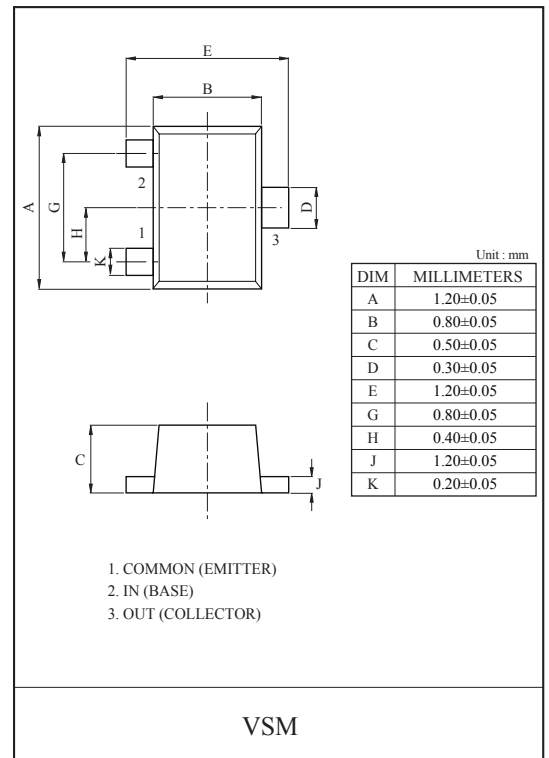
- With Built-in Bias Resistors
- Simplify Circuit Design
- Reduce a Quantity of Parts and Manufacturing Process
- High Packing Density.
- Suffix U : Qualified to AEC-Q101
ex) KRC407V-RTK/HU

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(kΩ)	R2(kΩ)
KRC407V	10	47
KRC408V	22	47
KRC409V	47	22

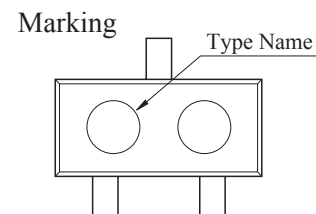


MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC407V ~ 409V	V_O	50	V
Input Voltage	KRC407V	V_I	30, -6	V
	KRC408V		40, -7	
	KRC409V		40, -15	
Output Current	KRC407V ~ 409V	I_O	100	mA
Power Dissipation		P_D	100	mW
Junction Temperature		T_j	-55 ~ 150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

MARK SPEC

TYPE	KRC407V	KRC408V	KRC409V
MARK	NH	NI	NJ



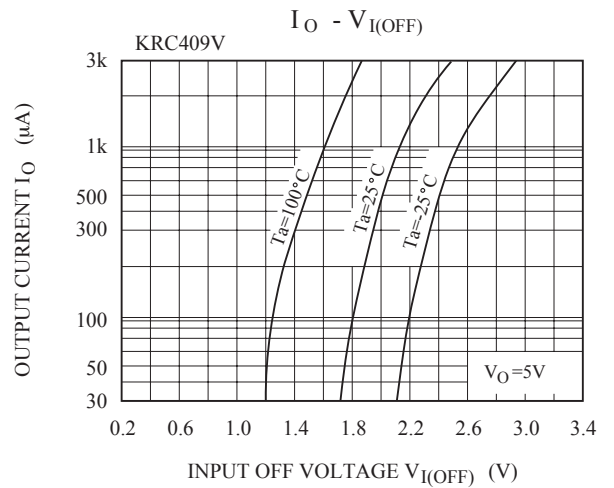
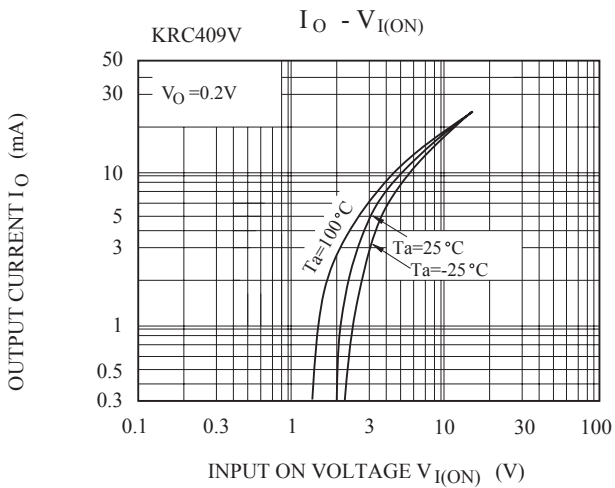
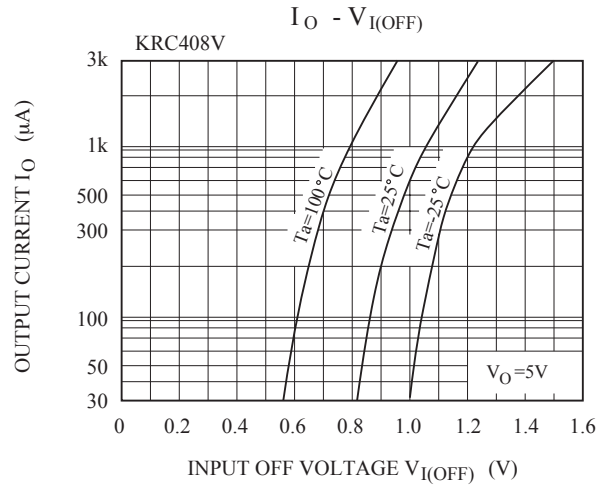
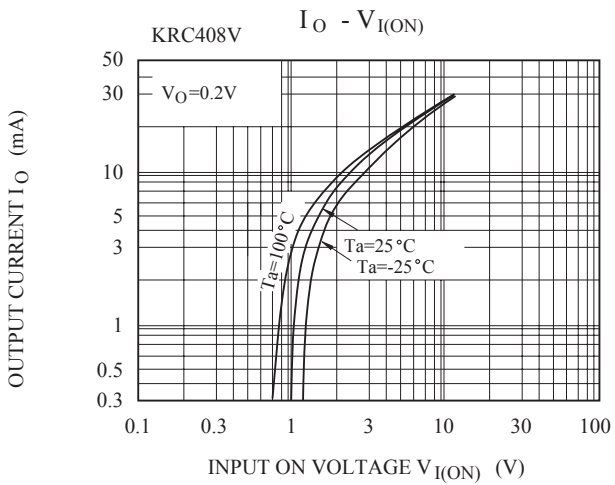
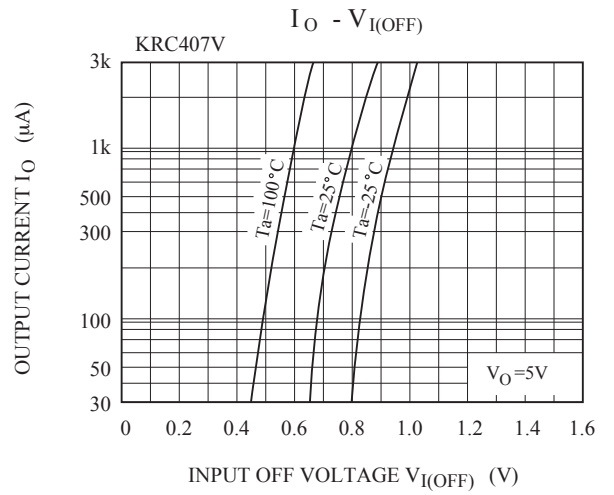
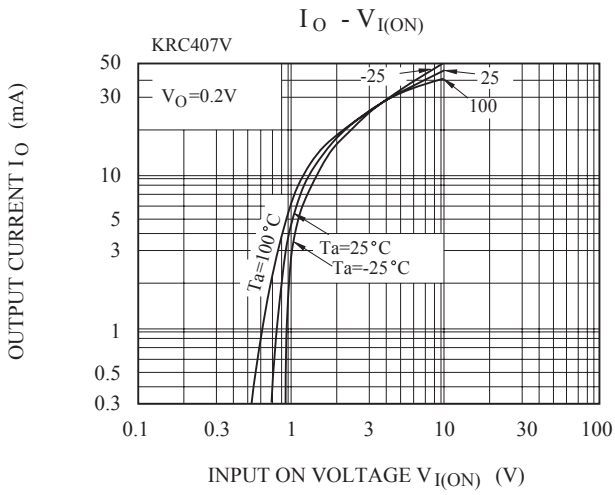
KRC407V~KRC409V

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Cut-off Current	KRC407V ~ 409V	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA	
DC Current Gain	KRC407V	G_I	$V_O=5V, I_O=10mA$	80	150	-		
	KRC408V			80	150	-		
	KRC409V			70	140	-		
Output Voltage	KRC407V ~ 409V	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V	
Input Voltage (ON)	KRC407V	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.2	1.8	V	
	KRC408V			-	1.8	2.6		
	KRC409V			-	3.0	5.8		
Input Voltage (OFF)	KRC407V	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	0.75	-	V	
	KRC408V			0.6	0.88	-		
	KRC409V			1.5	1.82	-		
Transition Frequency	KRC407V ~ 409V	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz	
Input Current	KRC407V	I_I	$V_I=5V$	-	-	0.88	mA	
	KRC408V			-	-	0.36		
	KRC409V			-	-	0.16		
Switching Time	Rise Time	KRC407V	$V_O=5V, V_{IN}=5V$ $R_L=1k\Omega$	-	0.05	-	μS	
		KRC408V		-	0.12	-		
		KRC409V		-	0.26	-		
	Storage Time	KRC407V		t_{stg}	-	2.0		-
		KRC408V			-	2.4		-
		KRC409V			-	1.5		-
	Fall Time	KRC407V		t_f	-	0.36		-
		KRC408V			-	0.4		-
		KRC409V			-	0.41		-
Input Resistor	KRC407V	R1	-	7	10	13	k Ω	
	KRC408V			15.4	22	28.6		
	KRC409V			32.9	47	61.1		
Resistor Ratio	KRC407V	R2/R1	-	3.7	4.7	5.7		
	KRC408V			1.7	2.1	2.6		
	KRC409V			0.37	0.47	0.57		

Note : * Characteristic of Transistor Only.

KRC407V~KRC409V



KRC407V~KRC409V

