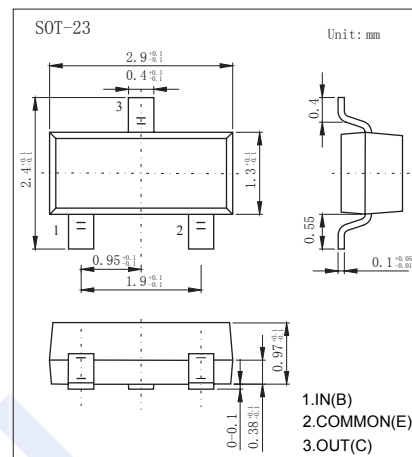


NPN Transistors

KRC101S ~ KRC106S

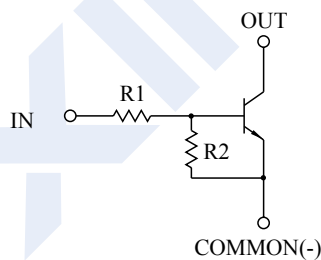
■ Features

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



BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC101S	4.7	4.7
KRC102S	10	10
KRC103S	22	22
KRC104S	47	47
KRC105S	2.2	47
KRC106S	4.7	47



■ Absolute Maximum Ratings Ta = 25°C

Parameter		Symbol	Rating	Unit
Output Voltage	KRC101S~106S	V _o	50	
Input Voltage	KRC101S	V _i	20,-10	V
	KRC102S		30,-10	
	KRC103S		40,-10	
	KRC104S		40,-10	
	KRC105S		12,-5	
	KRC106S		20,-5	
Output Current	KRC101S~106S	I _o	100	mA
Power Dissipation		P _D	200	mW
Junction Temperature		T _J	150	°C
Storage Temperature range		T _{stg}	-55 to 150	

NPN Transistors

KRC101S ~ KRC106S

■ Electrical Characteristics Ta = 25°C

Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	KRC101S~106S	VO(ON)	Io= 10mA, Ii = 0.5mA		0.1	0.3	V
Input Voltage (ON)	KRC101S	VI(ON)	Vo= 0.2V, Io =5mA		1.5	2	V
	KRC102S				1.8	2.4	
	KRC103S				2.1	3	
	KRC104S				2.8	5	
	KRC105S				0.8	1.1	
	KRC106S				0.9	1.3	
Input Voltage (OFF)	KRC101S~104S	VI(OFF)	Vo= 5V, Io=0.1mA	1	1.2		
	KRC105S~106S			0.5	0.65		
Output Cut-off Current	KRC101S~106S	IO(OFF)	Vo= 50V, Vi =0			500	nA
Input Current	KRC101S	Ii	Vi =5V			1.8	mA
	KRC102S					0.88	
	KRC103S					0.36	
	KRC104S					0.18	
	KRC105S					3.6	
	KRC106S					1.8	
DC Current Gain	KRC101S	Gi	Vo= 5V, Io=10mA	30	55		
	KRC102S			50	80		
	KRC103S			70	120		
	KRC104S~106S			80	200		
Rise Time	KRC101S	tr	Vo=5V VIN=5V RL=1kΩ		0.03		uS
	KRC102S				0.05		
	KRC103S				0.12		
	KRC104S				0.22		
	KRC105S				0.01		
	KRC106S				0.03		
Storage Time	KRC101S~106S	tstg	Vo=5V VIN=5V RL=1kΩ		2		
Fall Time	KRC101S	tf	Vo=5V VIN=5V RL=1kΩ		0.12		uS
	KRC102S				0.36		
	KRC103S				0.35		
	KRC104S				0.6		
	KRC105S				0.1		
	KRC106S				0.19		
Transition frequency	KRC101S~106S	fT	Vo= 10V, Io =5mA		200		MHz

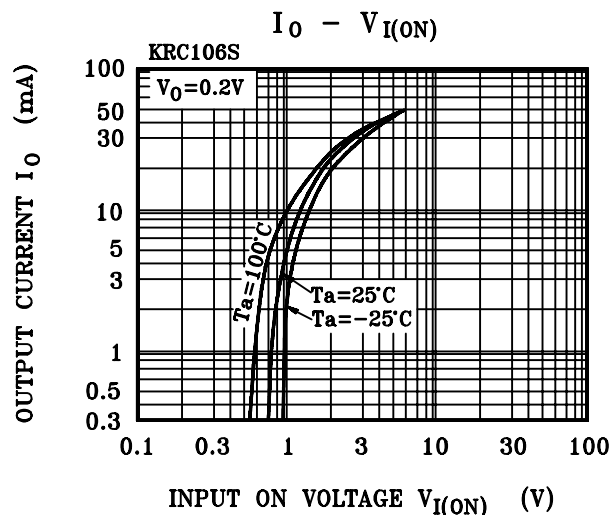
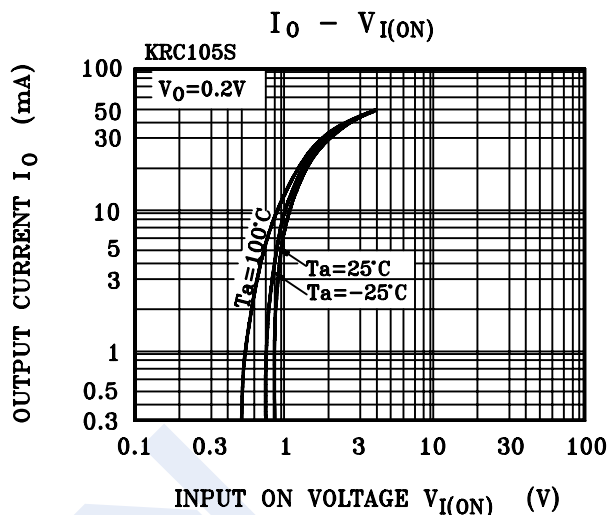
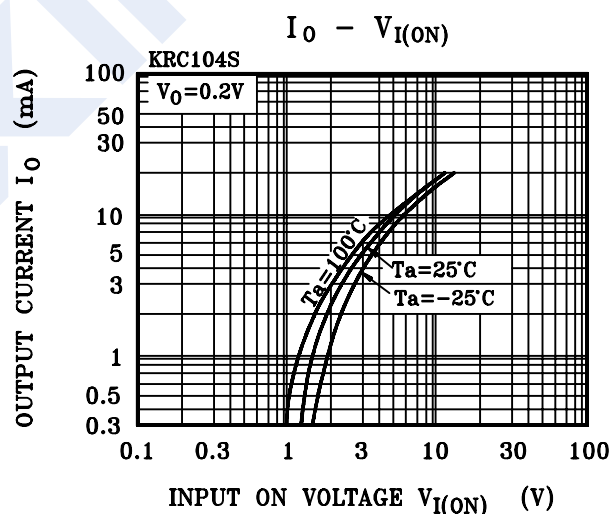
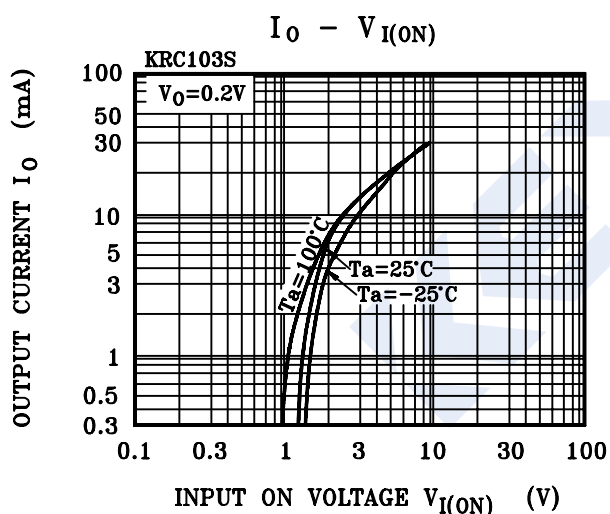
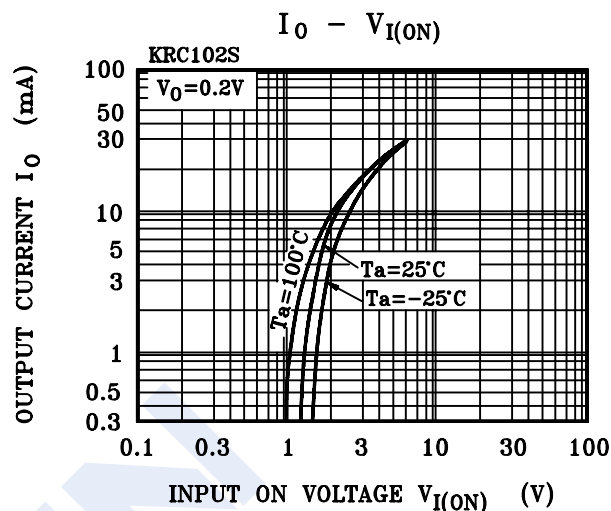
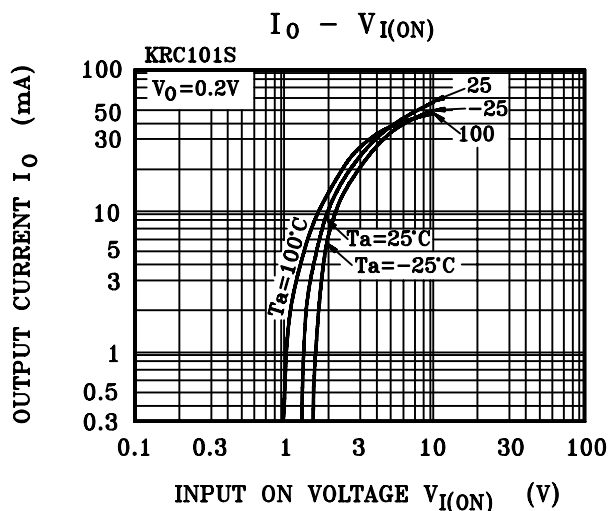
■ Marking

NO	KRC101S	KRC102S	KRC103S	KRC104S	KRC105S	KRC106S
Marking	NA	NB	NC	ND	NE	NF

NPN Transistors

KRC101S ~ KRC106S

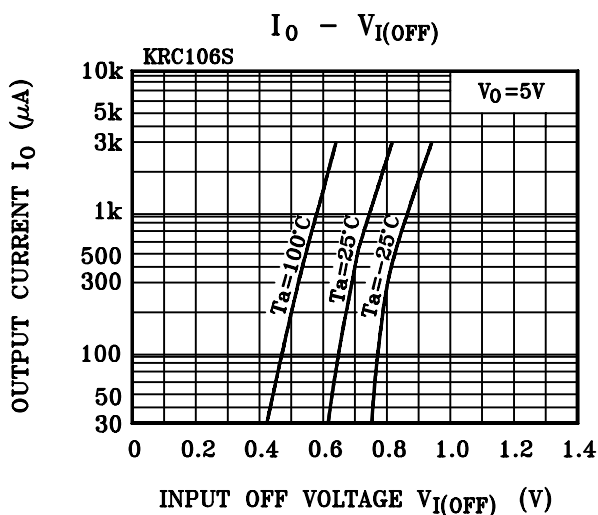
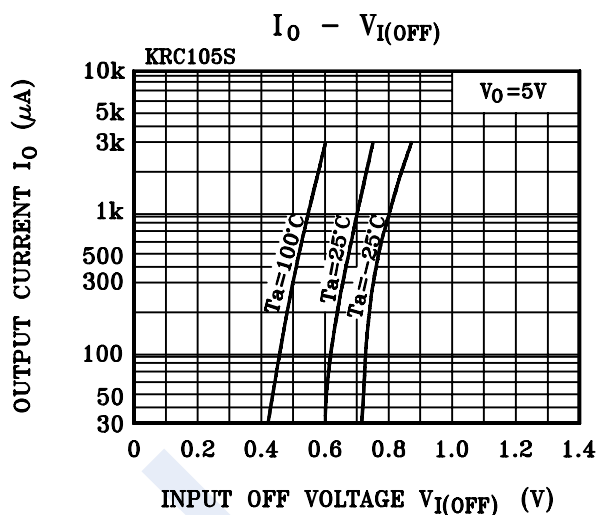
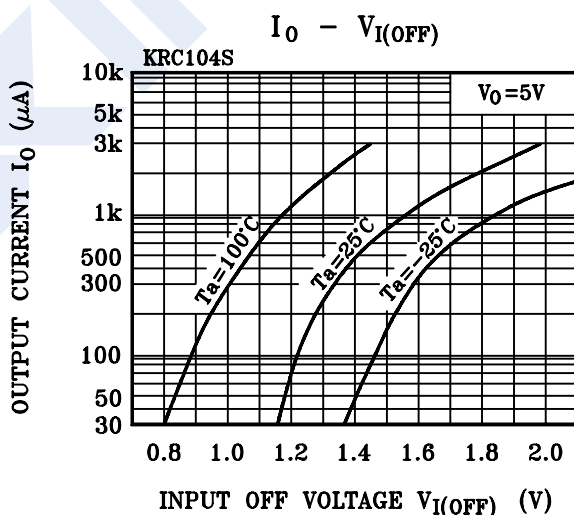
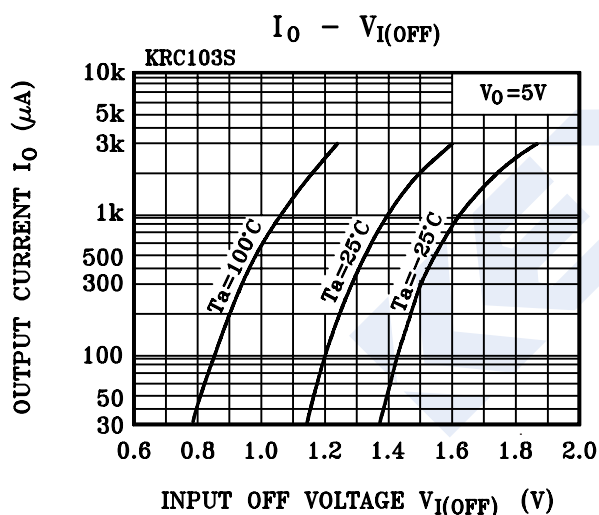
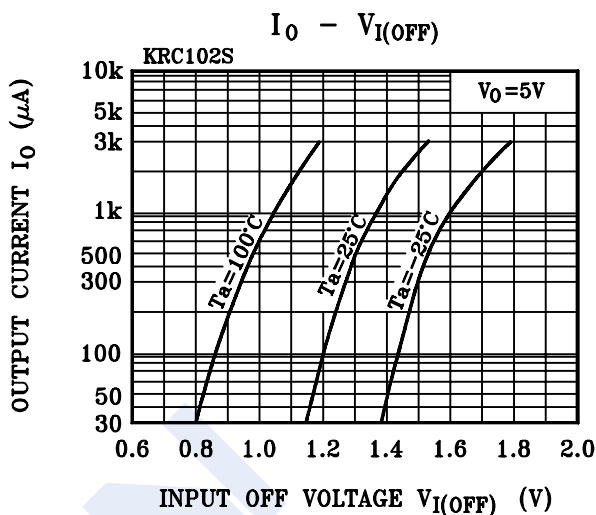
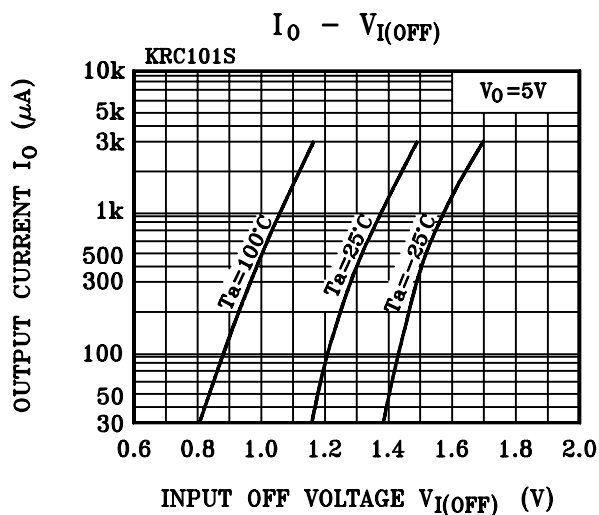
■ TyNical Characteristics



NPN Transistors

KRC101S ~ KRC106S

■ TyNical Characteristics



NPN Transistors

KRC101S ~ KRC106S

■ TyNical Characteristics

