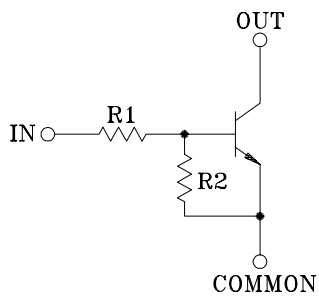


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

#### FEATURES

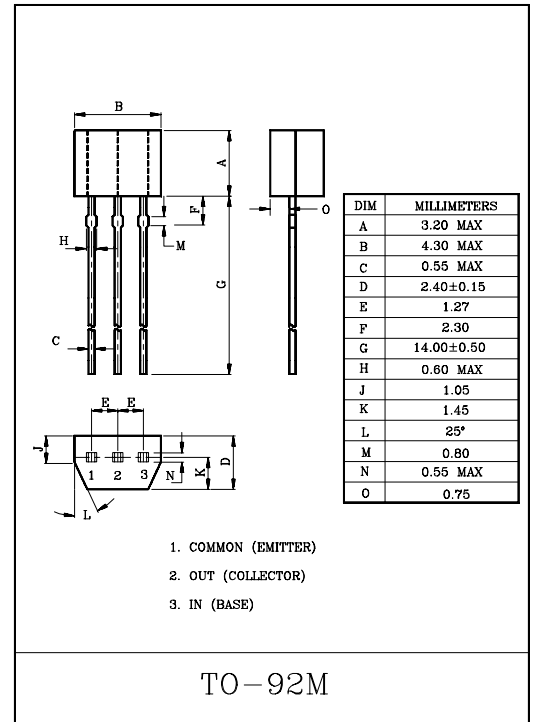
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

#### EQUIVALENT CIRCUIT



#### BIAS RESISTOR VALUES

TYPE NO.	R1(k $\Omega$ )	R2(k $\Omega$ )
KRC116M	1	10
KRC117M	2.2	2.2
KRC118M	2.2	10
KRC119M	4.7	10
KRC120M	10	4.7
KRC121M	47	10
KRC122M	100	100



#### MAXIMUM RATING (T<sub>a</sub>=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC116M~122M	V <sub>O</sub>	50	V
Input Voltage	KRC116M	V <sub>I</sub>	10, -5	V
	KRC117M		12, -10	
	KRC118M		12, -5	
	KRC119M		20, -7	
	KRC120M		30, -10	
	KRC121M		40, -15	
	KRC122M		40, -10	
Output Current	KRC116M~122M	I <sub>O</sub>	100	mA
Power Dissipation		P <sub>D</sub>	400	mW
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-55~150	°C

# KRC116M~KRC122M

## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC116M~122M	I <sub>O(OFF)</sub>	V <sub>O</sub> =50V, V <sub>I</sub> =0	-	-	500	nA
DC Current Gain	KRC116M	G <sub>I</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =5mA	33	-	-	
	KRC117M		V <sub>O</sub> =5V, I <sub>O</sub> =20mA	20	-	-	
	KRC118M		V <sub>O</sub> =5V, I <sub>O</sub> =10mA	33	-	-	
	KRC119M		V <sub>O</sub> =5V, I <sub>O</sub> =10mA	30	-	-	
	KRC120M		V <sub>O</sub> =5V, I <sub>O</sub> =10mA	24	-	-	
	KRC121M		V <sub>O</sub> =5V, I <sub>O</sub> =5mA	33	-	-	
	KRC122M		V <sub>O</sub> =5V, I <sub>O</sub> =5mA	62	-	-	
Output Voltage	KRC116M	V <sub>O(ON)</sub>	I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	-	0.3	V
	KRC117M		I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	
	KRC118M		I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	-	0.3	
	KRC119M		I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	
	KRC120M		I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	
	KRC121M		I <sub>O</sub> =10mA, I <sub>I</sub> =0.5mA	-	0.1	0.3	
	KRC122M		I <sub>O</sub> =5mA, I <sub>I</sub> =0.25mA	-	0.1	0.3	
Input Voltage (ON)	KRC116M	V <sub>I(ON)</sub>	V <sub>O</sub> =0.3V, I <sub>O</sub> =20mA	-	0.98	3	V
	KRC117M		V <sub>O</sub> =0.3V, I <sub>O</sub> =20mA	-	1.83	3	
	KRC118M		V <sub>O</sub> =0.3V, I <sub>O</sub> =20mA	-	1.22	3	
	KRC119M		V <sub>O</sub> =0.3V, I <sub>O</sub> =20mA	-	1.76	2.5	
	KRC120M		V <sub>O</sub> =0.3V, I <sub>O</sub> =2mA	-	2	3	
	KRC121M		V <sub>O</sub> =0.3V, I <sub>O</sub> =2mA	-	3.9	5	
	KRC122M		V <sub>O</sub> =0.3V, I <sub>O</sub> =1mA	-	1.64	3	
Input Voltage (OFF)	KRC116M	V <sub>I(OFF)</sub>	V <sub>CC</sub> =5V, I <sub>O</sub> =100μA	0.3	0.63	-	V
	KRC117M			0.5	1.15	-	
	KRC118M			0.3	0.67	-	
	KRC119M			0.3	0.82	-	
	KRC120M			0.8	1.68	-	
	KRC121M			1	3.09	-	
	KRC122M			0.5	1.17	-	
Transition Frequency	KRC116M~122M	f <sub>T</sub> *	V <sub>O</sub> =10V, I <sub>O</sub> =5mA	-	250	-	MHz
Input Current	KRC116M	I <sub>I</sub>	V <sub>I</sub> =5V	-	-	7.2	mA
	KRC117M			-	-	3.8	
	KRC118M			-	-	3.8	
	KRC119M			-	-	1.8	
	KRC120M			-	-	0.88	
	KRC121M			-	-	0.16	
	KRC122M			-	-	0.15	

Note : \*Characteristic of Transistor Only