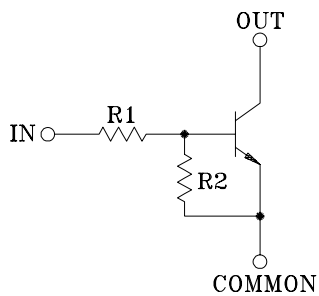


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION

FEATURES

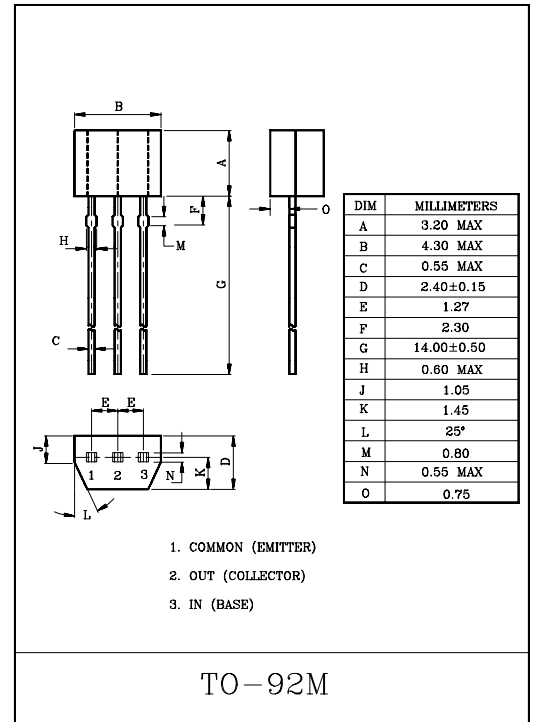
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
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_a=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC116M~122M	V _O	50	V
Input Voltage	KRC116M	V _I	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 _O	100	mA
Power Dissipation		P _D	400	mW
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55~150	°C

KRC116M~KRC122M

ELECTRICAL CHARACTERISTICS (T_a=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC116M~122M	I _{O(OFF)}	V _O =50V, V _I =0	–	–	500	nA
DC Current Gain	KRC116M	G _I	V _O =5V, I _O =5mA	33	–	–	
	KRC117M		V _O =5V, I _O =20mA	20	–	–	
	KRC118M		V _O =5V, I _O =10mA	33	–	–	
	KRC119M		V _O =5V, I _O =10mA	30	–	–	
	KRC120M		V _O =5V, I _O =10mA	24	–	–	
	KRC121M		V _O =5V, I _O =5mA	33	–	–	
	KRC122M		V _O =5V, I _O =5mA	62	–	–	
Output Voltage	KRC116M	V _{O(ON)}	I _O =10mA, I _I =0.5mA	–	–	0.3	V
	KRC117M		I _O =10mA, I _I =0.5mA	–	0.1	0.3	
	KRC118M		I _O =10mA, I _I =0.5mA	–	–	0.3	
	KRC119M		I _O =10mA, I _I =0.5mA	–	0.1	0.3	
	KRC120M		I _O =10mA, I _I =0.5mA	–	0.1	0.3	
	KRC121M		I _O =10mA, I _I =0.5mA	–	0.1	0.3	
	KRC122M		I _O =5mA, I _I =0.25mA	–	0.1	0.3	
Input Voltage (ON)	KRC116M	V _{I(ON)}	V _O =0.3V, I _O =20mA	–	0.98	3	V
	KRC117M		V _O =0.3V, I _O =20mA	–	1.83	3	
	KRC118M		V _O =0.3V, I _O =20mA	–	1.22	3	
	KRC119M		V _O =0.3V, I _O =20mA	–	1.76	2.5	
	KRC120M		V _O =0.3V, I _O =2mA	–	2	3	
	KRC121M		V _O =0.3V, I _O =2mA	–	3.9	5	
	KRC122M		V _O =0.3V, I _O =1mA	–	1.64	3	
Input Voltage (OFF)	KRC116M	V _{I(OFF)}	V _{CC} =5V, I _O =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 _T *	V _O =10V, I _O =5mA	–	250	–	MHz
Input Current	KRC116M	I _I	V _I =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