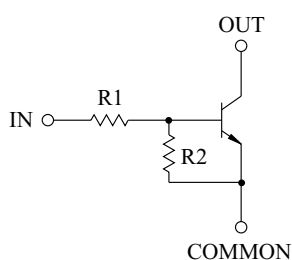


HIGH CURRENT SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

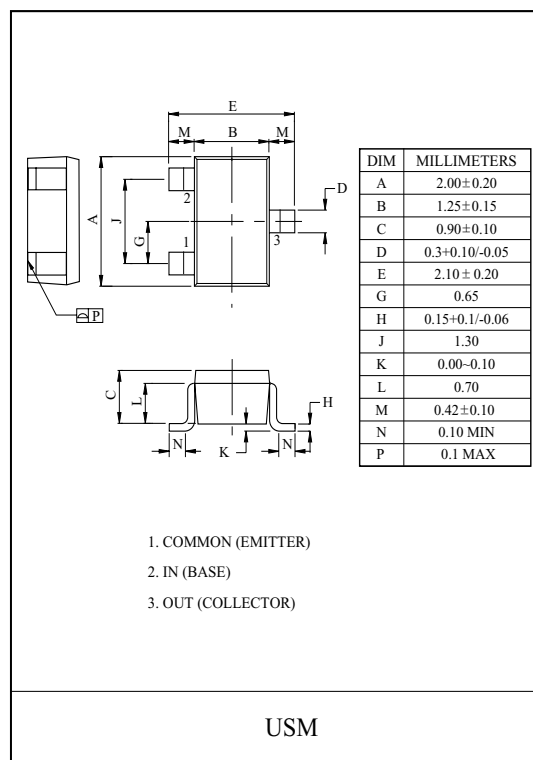
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Output Current : 500mA.
- Suffix U : Qualified to AEC-Q101.
ex) KRC452-RTK/HU

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE NO.	R1(k Ω)	R2(k Ω)
KRC451	1	1
KRC452	2.2	2.2
KRC453	4.7	4.7
KRC454	10	10
KRC455	0.47	10
KRC456	1	10
KRC457	2.2	10



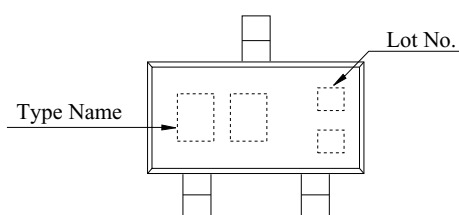
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC451 457	V _O	12	V
Input Voltage	KRC451	V _I	10, -10	V
	KRC452		12, -10	
	KRC453		20, -10	
	KRC454		30, -10	
	KRC455		10, -5	
	KRC456		10, -5	
	KRC457		12, -6	
Output Current	KRC451 457	I _O	500	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	KRC451	KRC452	KRC453	KRC454	KRC455	KRC456	KRC457
MARK	CA	CB	CC	CD	CE	CF	CG

Marking



KRC451~457

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC451 457	$I_{O(OFF)}$	$V_O=12V, V_I=0$	-	-	10	μA
DC Current Gain	KRC451	G_I	$V_O=5V, I_O=50mA$	33	-	-	
	KRC452			39	-	-	
	KRC453			47	-	-	
	KRC454			56	-	-	
	KRC455			56	-	-	
	KRC456			56	-	-	
	KRC457			56	-	-	
Output Voltage	KRC451 457	$V_{O(ON)}$	$I_O=50mA, I_I=2.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC451	$V_{I(ON)}$	$V_O=0.3V, I_O=20mA$	-	-	3.0	V
	KRC452			-	-	3.0	
	KRC453			-	-	3.0	
	KRC454			-	-	3.0	
	KRC455			-	-	3.0	
	KRC456			-	-	3.0	
	KRC457					2.0	
Input Voltage (OFF)	KRA451 454	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	-	-	V
	KRA455 457			0.3	-	-	
Transition Frequency	KRC451 457	f_T^*	$V_O=10V, I_O=5mA, f=100MHz$	-	200	-	MHz
Input Current	KRC451	I_I	$V_I=5V$	-	-	7.2	mA
	KRC452			-	-	3.8	
	KRC453			-	-	1.8	
	KRC454			-	-	0.88	
	KRC455			-	-	7.2	
	KRC456			-	-	7.2	
	KRC457			-	-	3.6	
Input Resistor	KRC451	R1	-	0.7	1	1.3	k Ω
	KRC452			1.54	2.2	2.86	
	KRC453			3.29	4.7	6.11	
	KRC454			7	10	13	
	KRC455			0.329	0.47	0.611	
	KRC456			0.7	1	13	
	KRC457			1.54	2.2	2.86	
Resistor Ratio	KRC451 454	R2/R1	-	0.8	1.0	1.2	
	KRC455			17	21	26	
	KRC456			8	10	12	
	KRC457			3.6	4.5	5.5	

Note : * Characteristic of Transistor Only.