

Bias Resistor Built-in TRANSISTOR

KRC406UL is designed to suit for switching application, interface circuit and driver circuit application

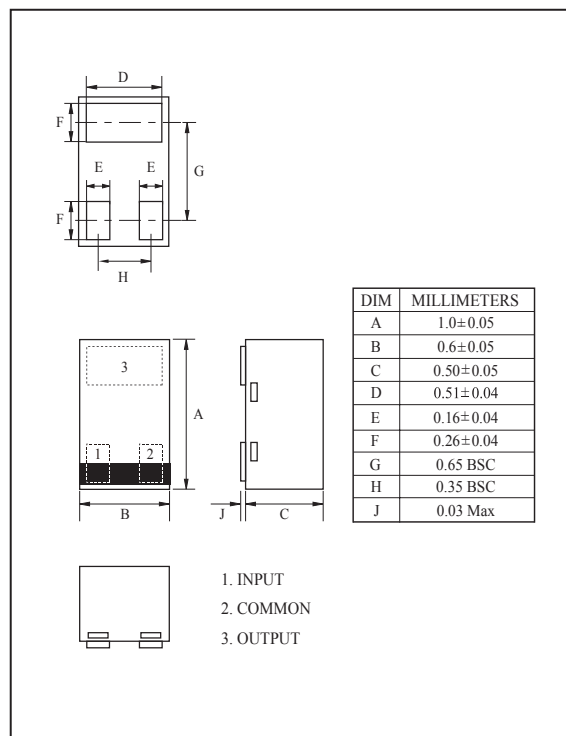
FEATURES

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

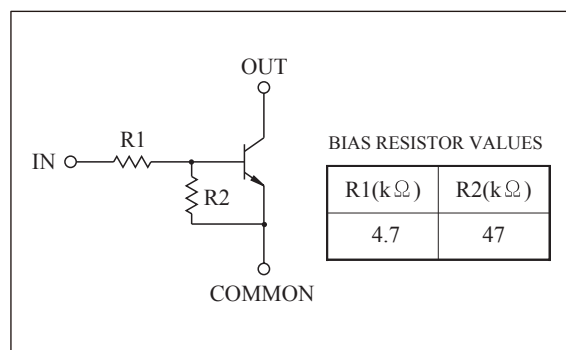
APPLICATION

- Digital Application.
- Control of IC input.
- General Purpose.

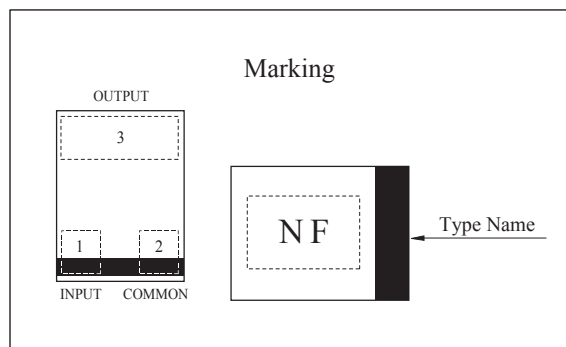
PACKAGE DIMENSION (ULP-3(1))



EQUIVALENT CIRCUIT



MARKING CODE



PRODUCT DATASHEET

Epitaxial Planar Transistor - KRC406UL

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Output Voltage	V_o	50	V
Input Voltage	V_i	20, -5	V
Output Current	I_o	100	mA
Power Dissipation	P_D *	250	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-50 ~ 150	°C

* Package mounted on a ceramic board(7x5x0.6mm).

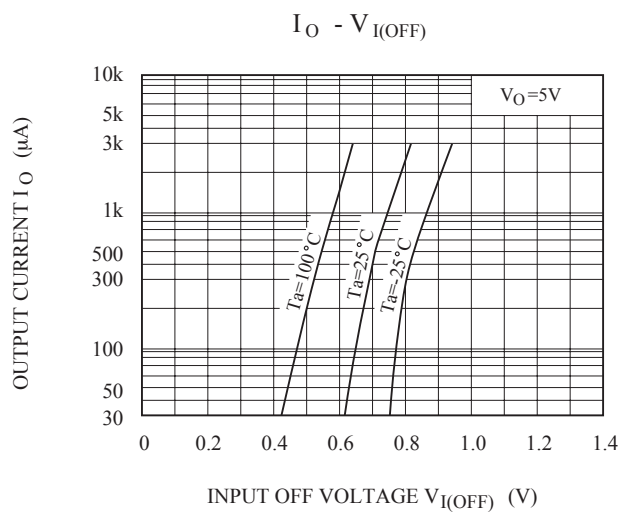
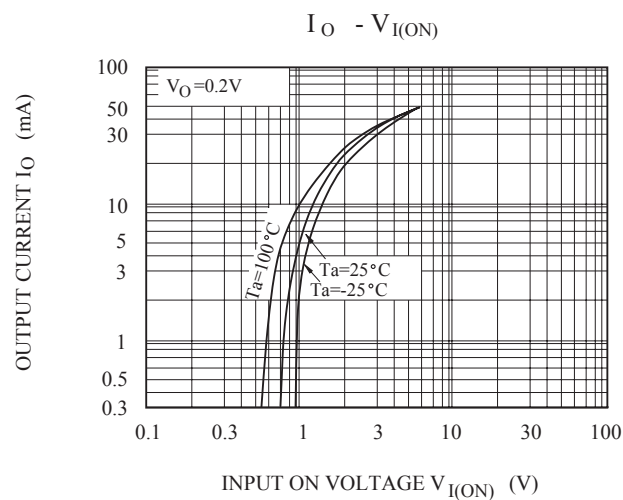
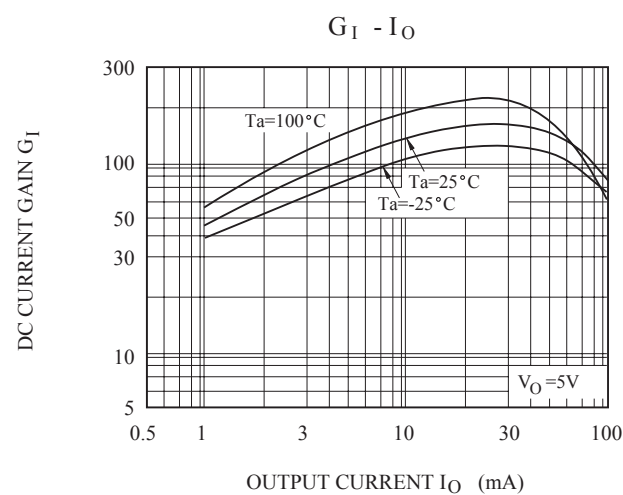
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current		$I_{O(OFF)}$	$V_o=50V, V_i=0$	-	-	500	nA
DC Current Gain		G_I	$V_o=5V, I_o=10mA$	80	200	-	-
Output Voltage		$V_{O(ON)}$	$I_o=10mA, I_i=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)		$V_{I(ON)}$	$V_o=0.2V, I_o=5mA$	-	0.9	1.3	V
Input Votlage (OFF)		$V_{I(OFF)}$	$I_o=5V, I_o=0.1mA$	0.5	0.65	-	V
Transition Frequency		f_T *	$I_o=10V, I_o=5mA$	-	200	-	MHz
Input Current		I_i	$V_i=5$	-	-	1.8	mA
Switching Time	Rise Time	t_r	$V_o=5V, V_{IN}=5V, R_L=1k\Omega$	-	0.03	-	μs
	Storage Time	t_{stg}		-	2.0	-	
	Fall Time	T_f		-	0.19	-	
Input Resistor		R_1	-	3.29	4.7	6.11	k Ω
Resistor ratio		R_1/R_2	-	8	10	12	-

* Characteristic of Transistor Only.

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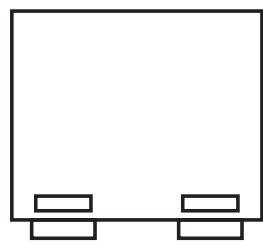
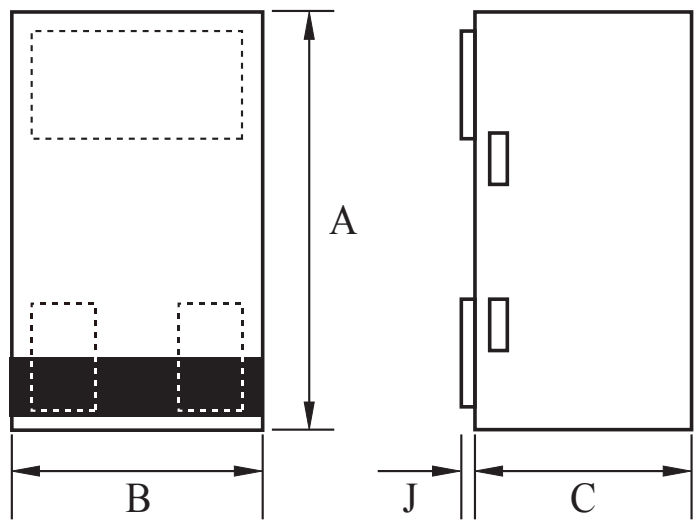
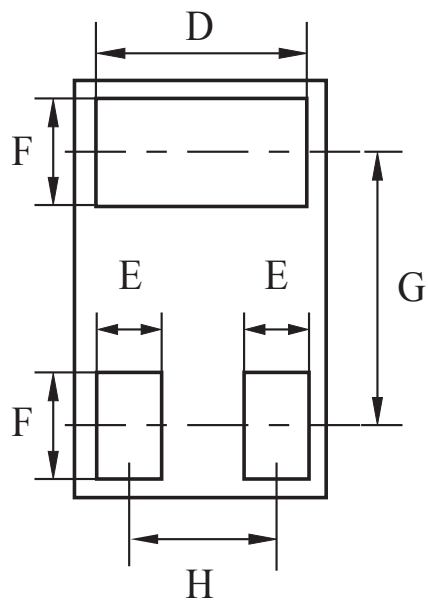


PRODUCT DATASHEET

Epitaxial Planar Transistor - KRC406UL

PACKAGE DIMENSION

(ULP-3(1))



DIM	MILLIMETERS
A	1.0±0.05
B	0.6±0.05
C	0.50±0.05
D	0.51±0.04
E	0.16±0.04
F	0.26±0.04
G	0.65 BSC
H	0.35 BSC
J	0.03 Max

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1. The products described in this data are intended to be used in general-purpose electronic equipment.
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2. When you intend to use these products with equipment or device which require an extremely high of reliability and special applications (such as automobile, air travel aerospace, transportation equipment, life support, system and safety devices) in which special quality and reliability and the failure or malfunction of products may directly jeopardize or harm the human body or damage to property and any application other than the standard application intended, please be sure to consult with our sales representative in advance.
3. On designing your application, please use product within the ranges guaranteed by KEC for maximum rating, operating supply voltage range, heat radiation characteristics and other characteristics. User shall be responsible for failure or damage when used beyond the guaranteed ranges.
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