

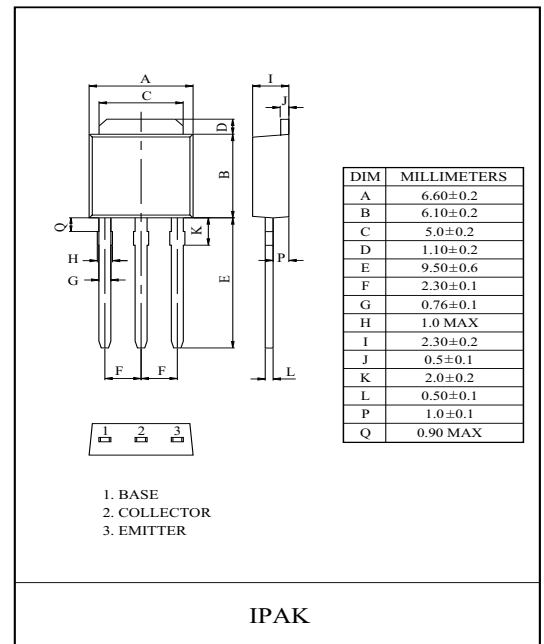
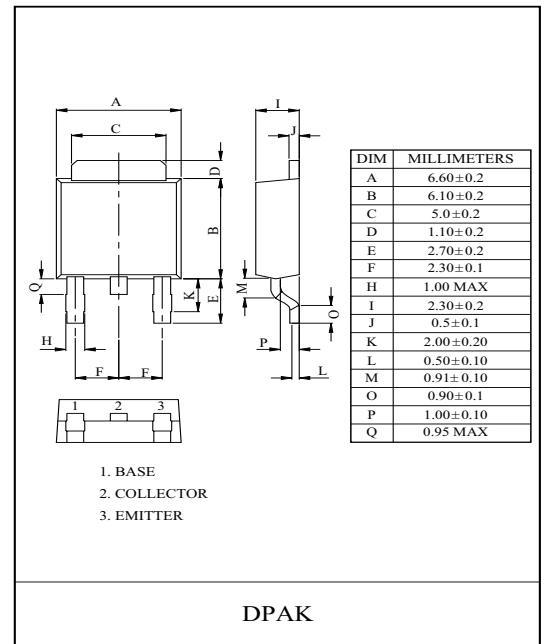
GENERAL PURPOSE APPLICATION.

FEATURES

- Low Collector-Emitter Saturation Voltage
: $V_{CE(sat)} = -2.0V(\text{Max.})$.
- Complementary to KTC2022D/L.

MAXIMUM RATING ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-5	A
Base Current	I_B	-0.5	A
Collector Power Dissipation ($T_c = 25^\circ\text{C}$)	P_C	20	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -100V, I_E = 0$	-	-	-100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-1	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50mA, I_B = 0$	-100	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -5V, I_C = -1A$	70	-	240	
	$h_{FE(2)}$	$V_{CE} = -5V, I_C = -4A$	20	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -4A, I_B = -0.4A$	-	-	-2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -5V, I_C = -4A$	-	-	-1.5	V
Transition Frequency	f_T	$V_{CE} = -5V, I_C = -1A$	-	30	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	270	-	pF

Note : $h_{FE(1)}$ Classification O:70~140, Y:120~240.

KTA1042D/L

