

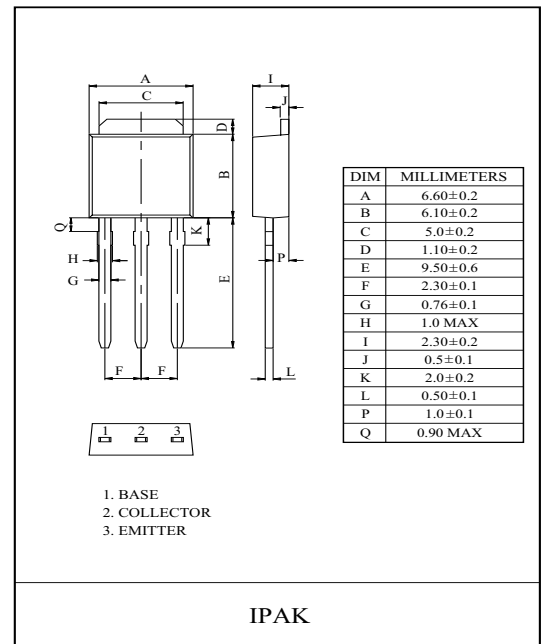
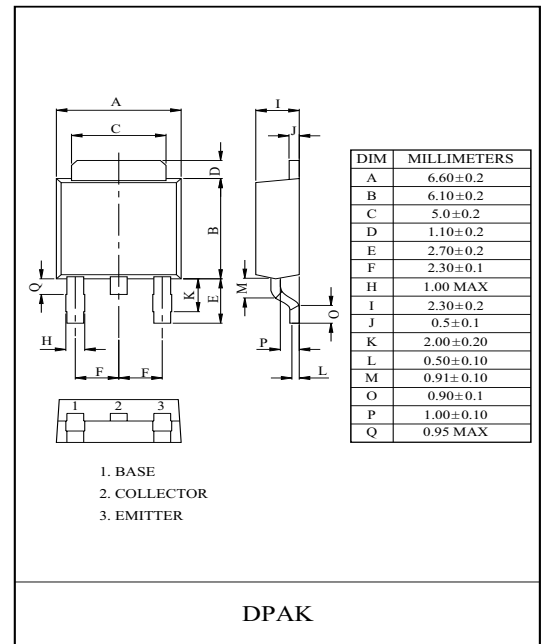
GENERAL PURPOSE APPLICATION.

### FEATURES

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

### MAXIMUM RATING (Ta=25 °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 (Tc=25 °C)	$P_C$	20	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C



### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -100V, I_E = 0$	-	-	-100	$\mu A$
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

