

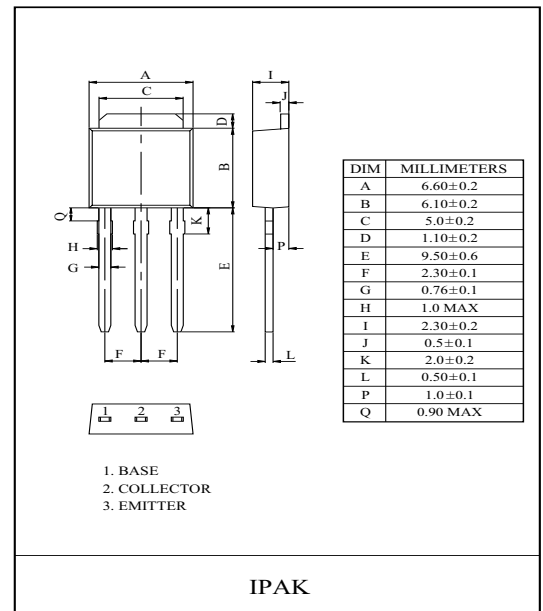
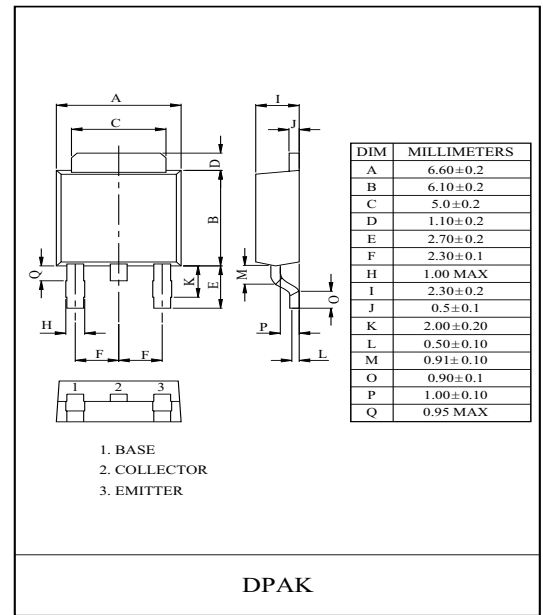
GENERAL PURPOSE APPLICATION.  
DPAK FOR SVRFACE MOUNT APPLICATIONS.

### FEATURES

- Low Collector Saturation Voltage  
:  $V_{CE(sat)}=1.0V(\text{Max.})$  at  $I_C=2A, I_B=0.2A$ .
- Straight Lead (IPAK, "L" Suffix)
- Complementary to KTA1040D/L.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	60	V
Emitter-Base Voltage	$V_{EBO}$	7	V
Collector Current	$I_C$	3	A
Base Current	$I_B$	0.5	A
Collector Power Dissipation	$P_C$	$T_a=25^\circ\text{C}$	1.0
		$T_c=25^\circ\text{C}$	20
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	$I_{CBO}$	$V_{CB}=60V, I_E=0$	-	-	100	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	100	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}, I_B=0$	60	-	-	V
DC Current Gain	$h_{FE}$ (Note)	$V_{CE}=5V, I_C=0.5A$	100	-	300	-
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2A, I_B=0.2A$	-	0.5	1.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=5V, I_C=0.5A$	-	0.7	1.0	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=0.5A$	-	30	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	35	-	pF
Switching Time	Turn-on Time	$t_{on}$	-	0.65	-	$\mu\text{s}$
	Storage Time	$t_{stg}$	-	1.3	-	
	Fall Time	$t_f$	-	0.65	-	

$I_{B1}=I_{B2}=0.2A$   
DUTY CYCLE  $\leq 1\%$

Note :  $h_{FE}$  Classification Y:100~200, GR:150~300.

# KTC2020D/L

