

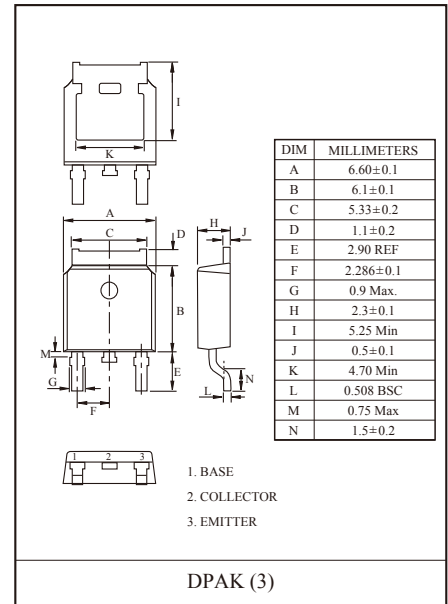
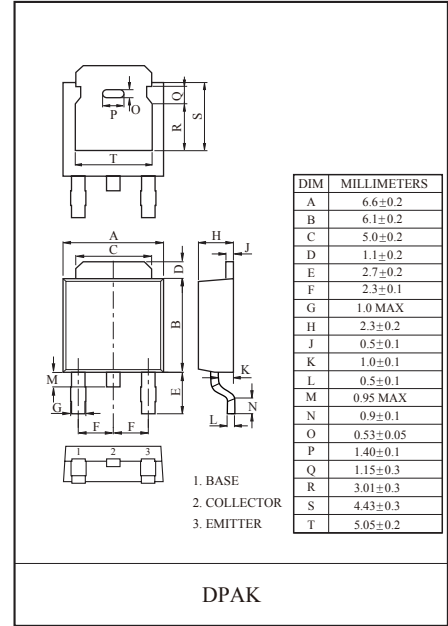
**GENERAL PURPOSE APPLICATION.
DPAK FOR SURFACE MOUNT APPLICATIONS.**

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)}=1.0V(\text{Max.})$ at $I_C=2A, I_B=0.2A$.
- Complementary to KTA1040D.
- Suffix U : Qualified to AEC-Q 101
ex) KTC2020D-Y-RTF/HU

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTI		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	Ta=25°C	P_C	1.0	W
	Tc=25°C		20	
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}	$V_{CB}=60V, I_E=0$	-	-	100	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=7V, I_C=0$	-	-	100	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	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}	$V_{CB}=10V, I_E=0, f=1MHz$	-	35	-	pF
Switching Time	Turn-on Time	t_{on}	<p>$I_{B1}=I_{B2}=0.2A$ DUTY CYCLE ≤ 1%</p>	-	0.65	-	μS
	Storage Time	t_{stg}		-	1.3	-	
	Fall Time	t_f		-	0.65	-	

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

KTC2020D

