

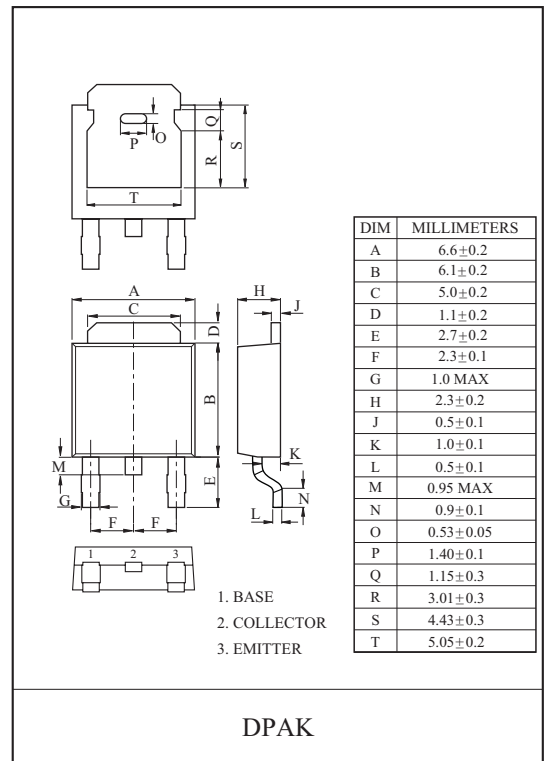
GENERAL PURPOSE APPLICATION.
DPAK FOR SURFACE MOUNT APPLICATIONS.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.0V(\text{Max.})$ at $I_C = -2A$, $I_B = -0.2A$.

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-80	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	1.0	W
		20	
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	



ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -80V$, $I_E = 0$	-	-	-100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -7V$, $I_C = 0$	-	-	-100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50mA$, $I_B = 0$	-80	-	-	V
DC Current Gain	$h_{FE(1)}(\text{Note})$	$V_{CE} = -5V$, $I_C = -0.5A$	120	-	300	
	$h_{FE(2)}$	$V_{CE} = -5V$, $I_C = -3A$	20	-	-	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -2A$, $I_B = -0.2A$	-	-0.25	-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}	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$	-	45	-	pF
Switching Time	Turn-on Time	t_{on}	-	0.4	-	μs
	Storage Time	t_{stg}	-	1.7	-	
	Fall Time	t_f	-	0.5	-	

Note : $h_{FE(1)}$ Classification Y:120~200, GR:150~300.

KTA1041D

