

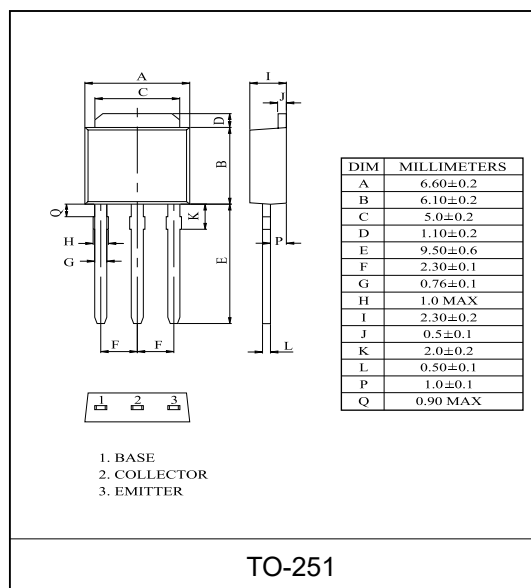
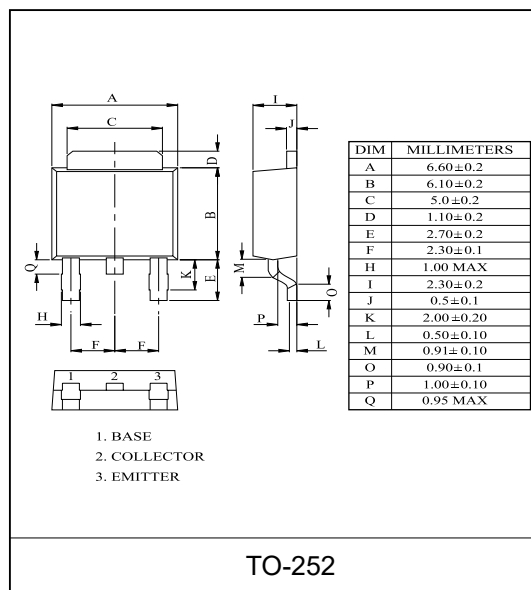
GENERAL PURPOSE APPLICATION DPAK FOR SURFACE MOUNT APPLICATIONS

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.0V(\text{Max.})$ at $I_C = -2A$, $I_B = -0.2A$.
- Straight Lead (TO-251, "I" Suffix)
- Complementary to FTC2020D/I.

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

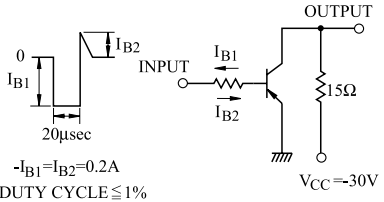
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-7	V
Collector Current	I_C	-3	A
Base Current	I_B	-0.5	A
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C 1.0	W
	$T_c = 25^\circ\text{C}$	20	
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$





FTA1040D/I

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		$h_{FE(1)}(\text{Note})$	$V_{CE}=-5V, I_C=-0.5A$	100	-	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}	 $-I_{B1}=I_{B2}=0.2A$ DUTY CYCLE $\leq 1\%$	-	0.4	-	μS
	Storage Time	t_{stg}		-	1.7	-	
	Fall Time	t_f		-	0.5	-	

Note : $h_{FE(1)}$ Classification Y:100~200, GR:150~300.

