

FTA1042D TRANSISTOR (PNP)

FEATURES

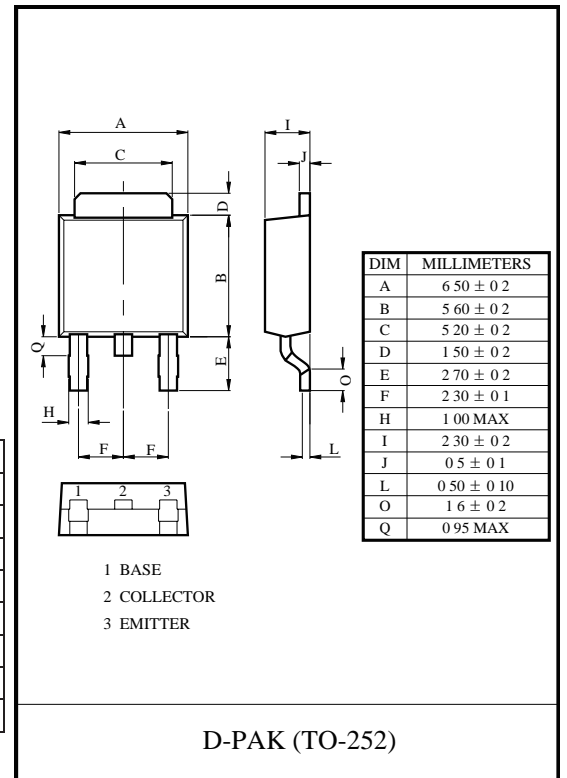
Low Collector-Emitter Saturation Voltage

APPLICATIONS

General Purpose Application

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-100	V
V_{CE0}	Collector-Emitter Voltage	-100	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-5	A
P_C	Collector Power Dissipation	1.25	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	100	$^\circ\text{C/W}$
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-+150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}^*$	$I_C=-1\text{mA}, I_E=0$	-100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=-50\text{mA}, I_B=0$	-100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}^*$	$I_E=-1\text{mA}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-100\text{V}, I_E=0$			-100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-1	mA
DC current gain	$h_{FE(1)}$	$V_{CE}=-5\text{V}, I_C=-1\text{A}$	70		240	
	$h_{FE(2)}$	$V_{CE}=-5\text{V}, I_C=-4\text{A}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-4\text{A}, I_B=-0.4\text{A}$			-2	V
Base-emitter voltage	V_{BE}	$V_{CE}=-5\text{V}, I_C=-4\text{A}$			-1.5	V
Transition frequency	f_T	$V_{CE}=-5\text{V}, I_C=-1\text{A}$		30		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		270		pF

* Pulse test

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240

Typical Characteristics

