



Shenzhen Tonghua Electronics Co.,Ltd

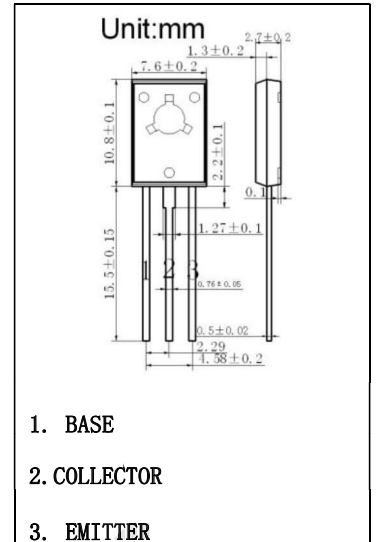
TO-126 Plastic-Encapsulate Transistors 13003-76 TRANSISTOR(NPN)

FEATURES

Power switching applications

Maximum ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	700	V
V _{CEO}	Collector-Emitter Voltage	400	V
V _{EBO}	Emitter-Base Voltage	9	V
I _C	Collector Current -Continuous	1.5	A
P _C	Collector Power Dissipation	1.25	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 0.1mA, I _E =0	700			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, I _B =0	400			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 0.1mA, I _C =0	9			V
Collector cut-off current	I _{CBO}	V _{CB} = 700V, I _E =0			100	µA
Collector cut-off current	I _{CEO}	V _{CE} = 400V, I _B =0			100	µA
Emitter cut-off current	I _{EBO}	V _{EB} = 9V, I _C =0			100	µA
DC current gain	h _{FE1}	V _{CE} = 5V, I _C = 0.2 A	10		40	
	h _{FE2}	V _{CE} = 5V, I _C = 1mA	8			
	h _{FE3}	V _{CE} = 5V, I _C =1.5A	5			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =1A, I _B =0.25A			0.8	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =1A, I _B =0.25A			1.2	V
Storage time	t _s	I _C =250mA(U19600)	2		4	µs
Fall time	t _f	I _C =250mA			1	µs
Transition Frequency	f _T	V _{CE} = 10V I _C = 100mA, f=1MHZ	4			MHZ

CLASSIFICATION OF h_{FE}

Rank	10-15	15-20	20-25	25-30	30-35	35-40
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CLASSIFICATION OF t_s

Rank	A1	A2	B1	B2
Range	2-2.5(us)	2.5-3(us)	3-3.5(us)	3.5-4(us)