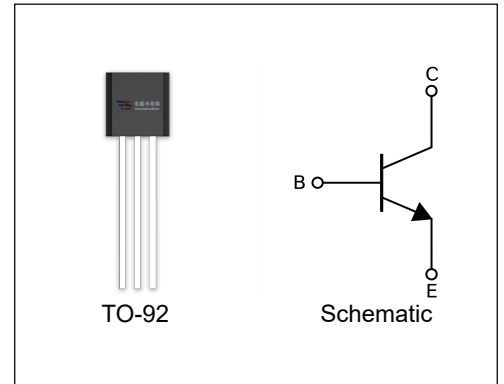


13002B TRANSISTOR (NPN)

FEATURE

- Power Switching Applications



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	600	V
V _{CE0}	Collector-Emitter Voltage	400	V
V _{EB0}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	0.8	A
P _C	Collector Power Dissipation	0.9	W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~150	°C

T_a=25 °C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	600			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=600V, I_E=0$			100	μA
	I_{CEO}	$V_{CE}=400V, I_B=0$			100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			100	μA
Dc current gain	h_{FE1}	$V_{CE}=10V, I_C=200mA$	9		40	
	h_{FE2}	$V_{CE}=10V, I_C=0.25mA$	5			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=200mA, I_B=40mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=200mA, I_B=40mA$			1.1	V
Transition frequency	f_T	$V_{CE}=10V, I_C=100mA$ $f=1MHz$	5			MHz
Fall time	t_f	$I_C=1A, I_{B1}=-I_{B2}=0.2A$			0.5	μs
Storage time	t_s	$V_{CC}=100V$			2.5	μs

CLASSIFICATION OF h_{FE1}

Range	9-15	15-20	20-25	25-30	30-35	35-40
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Static Characteristic
