

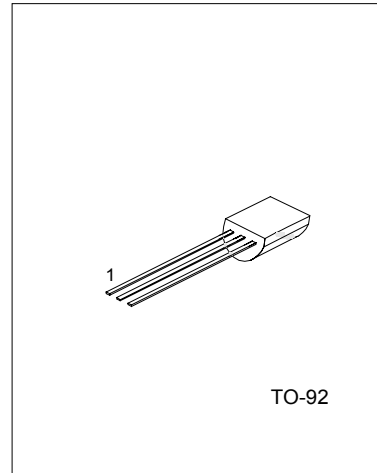
HIGH VOLTAGE SWITCHING TRANSISTOR

FEATURES

- *Collector-Emitter Voltage:
V_{CEO}=-150V
- *Collector Dissipation:
P_c(max)=625mW
- *High current gain

APPLICATIONS

- *Telephone Switching Circuit
- *Amplifier



1:EMITTER 2:BASE 3:COLLECTOR

ABSOLUTE MAXIMUM RATINGS (Ta=25°C ,unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CB0}	-160	V
Collector-emitter voltage	V _{CEO}	-150	V
Emitter-base voltage	V _{EB0}	-5	V
Collector dissipation	P _c	625	mW
Collector current	I _c	-600	mA
Junction Temperature	T _j	150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BV _{CB0}	I _c =-100μA,I _E =0	-160			V
Collector-emitter breakdown voltage	BV _{CEO}	I _c =-1mA,I _B =0	-150			V
Emitter-base breakdown voltage	BV _{EB0}	I _E =-10μA,I _c =0	-6			V
Collector cut-off current	I _{CB0}	V _{CB} =-120V,I _E =0			-50	nA
Emitter cut-off current	I _{EB0}	V _{EB} =-3V,I _c =0			-50	nA
DC current gain(note)	hFE1	V _{CE} =-5V,I _c =-1mA	80			
	hFE2	V _{CE} =-5V,I _c =-10mA	80		400	
	hFE3	V _{CE} =-5V,I _c =-50mA	80			
Collector-emitter saturation voltage	V _{CE} (sat)	I _c =-10mA,I _B =-1mA			-0.2	V
		I _c =-50mA,I _B =-5mA			-0.5	
Base-emitter saturation voltage	V _{BE} (sat)	I _c =-10mA,I _B =-1mA			-1	V
		I _c =-50mA,I _B =-5mA			-1	
Current gain bandwidth product	f _T	V _{CE} =-10V,I _c =-10mA,f=100MHz	100		400	MHz

(continued)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Output capacitance	Cob	V _{CB} =-10V, I _E =0 f=1MHz			6.0	pF
Noise Figure	NF	I _c =-0.25mA, V _{CE} =-5V R _s =1kΩ, f=10Hz to 15.7kHz			8	dB

Note: Pulse test: PW<300μs, Duty Cycle<2%

CLASSIFICATION OF hFE

RANK	A	B	C
RANGE	80-170	150-240	200-400

TYPICAL PARAMETERS PERFORMANCE

