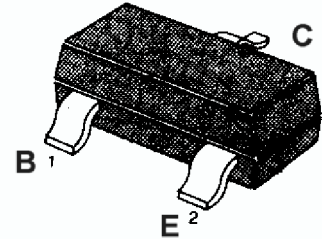


APPLICATION:General purpose application. Switching application.

MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CB0}	40	V
Collector-emitter voltage	V _{CEO}	20	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	500	mA
Collector Power Dissipation	P _C	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	- 55~150	°C

SOT-23


1.Base 2 .Emitter 3 .Collector

ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h _{FE}	64		300		V _{CE} = 1 V, I _C = 50 mA
Collector Cut-off Current	I _{CB0}			0.1	μA	V _{CB} =25 V, I _E =0
Emitter Cut-off Current	I _{EBO}			0.1	μA	V _{EB} = 3 V, I _C =0
Collector-Base Breakdown Voltage	BV _{CB0}	40			V	I _C =0.1 mA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	20			V	I _C =1 mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	5			V	I _E = 0.1mA, I _C =0
Base-Emitter Voltage	V _{BE(ON)}	0.6	0.67	0.7	V	V _{CE} =1 V, I _C = 10mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}		0.16	0.6	V	I _C =500 mA, I _B =50 mA
Base-Emitter Saturation Voltage	V _{BE(sat)}		0.91	1.2	dB	I _C =500 mA, I _B =50 mA

h_{FE} Classification And Marking

Print Mark	13D	13E	13F	13G	13H	13I	13J
Classification	D	E	F	G	H	I	J
h _{FE}	64~91	78~112	96~135	112~166	144~202	176~246	214~300