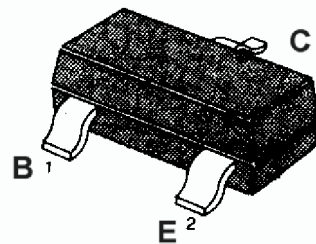


APPLICATION: General Purpose Applications.

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CB0}	-50	V
Collector-emitter voltage	V_{CE0}	-45	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_c	-100	mA
Collector Power Dissipation	P_c	200	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55~150	$^{\circ}\text{C}$

SOT-23


1.Base 2 .Emitter 3 .Collector

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h_{FE}	70		400		$V_{CE}=-6V, I_c=-2mA$
Collector Cut-off Current	I_{CBO}			-0.1	μA	$V_{CB}=-50V, I_E=0$
Emitter Cut-off Current	I_{EBO}			-0.1	μA	$V_{EB}=-5V, I_c=0$
Collector-Base Breakdown Voltage	BV_{CB0}	-50			V	$I_c=-0.1mA, I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CE0}	-45			V	$I_c=-1mA, I_B=0$
Emitter-Base Breakdown Voltage	BV_{EB0}	-5			V	$I_E=-0.1mA, I_c=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.3	V	$I_c=-100mA, I_B=-10mA$
Gain bandwidth product	f_t	80			MHz	$I_c=-1mA, V_{CE}=-10V$
Common Base Output Capacitance	C_{ob}		4	7	PF	$V_{CB}=-10V, I_E=0, f=1MHz$
Noise Figure	N_F		1	10	dB	$V_{CE}=-6V, I_c=-0.1mA, f=1KHz, R_g=10K\Omega$

 h_{FE} Classification And Marking

Print Mark	FQ	FR
Classification	Y	G
h_{FE}	120~240	200~400