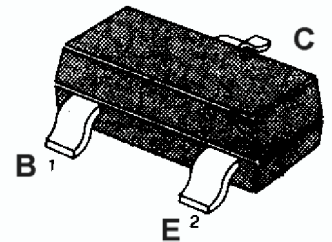


APPLICATION: High current applications.

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	45	V
Collector-emitter voltage	V_{CEO}	35	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_c	800	mA
Collector Power Dissipation	P_c	310	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55~150	$^\circ\text{C}$

SOT-23


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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}	100		630		$V_{CE}=1\text{V}$, $I_c=100\text{mA}$
Collector Cut-off Current	I_{CBO}			0.1	μA	$V_{CB}=45\text{V}$, $I_E=0$
Emitter Cut-off Current	I_{EBO}			0.1	μA	$V_{EB}=4\text{V}$, $I_c=0$
Collector-Base Breakdown Voltage	BV_{CBO}	45			V	$I_c=0.1\text{mA}$, $I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	35			V	$I_c=10\text{mA}$, $I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	5			V	$I_E=0.1\text{mA}$, $I_c=0$
Base-Emitter Voltage	V_{BE}			1.2	V	$V_{CE}=1\text{V}$, $I_c=300\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.7	V	$I_c=500\text{mA}$, $I_B=50\text{mA}$
Gain bandwidth product	f_r	50	100		MHz	$I_c=10\text{mA}$, $V_{CE}=5\text{V}$, $f=50\text{MHz}$
Common Base Output Capacitance	C_{ob}			12	PF	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

 h_{FE} Classification And Marking

Print Mark

Classification	16	25	40
h_{FE}	100~250	160~400	250~630