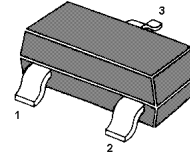


NPN Silicon Epitaxial Planar Transistor

Low saturation medium current application
Suitable for low voltage large current drivers



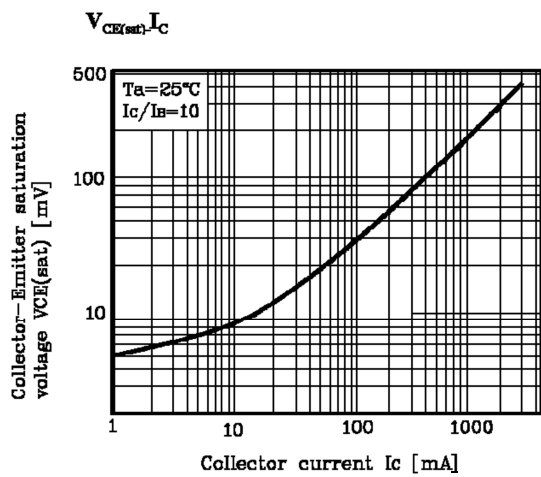
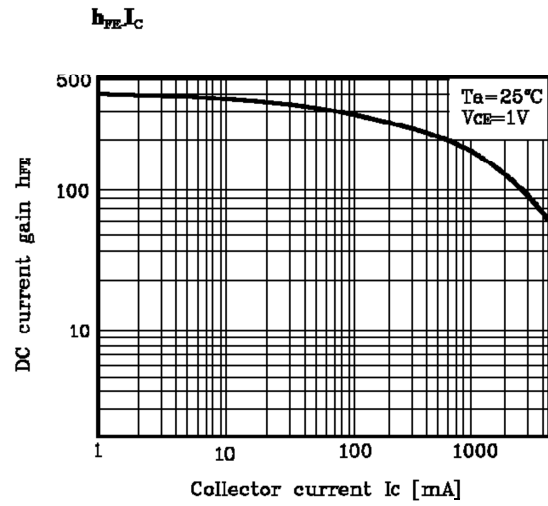
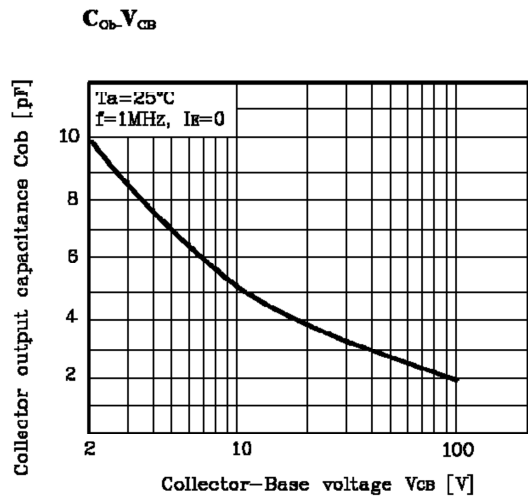
1.Base 2.Emitter 3.Collector
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CB0}	20	V
Collector Emitter Voltage	V _{CEO}	15	V
Emitter Base Voltage	V _{EBO}	6.5	V
Collector Current	I _C	1	A
Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _S	- 55 to + 150	°C

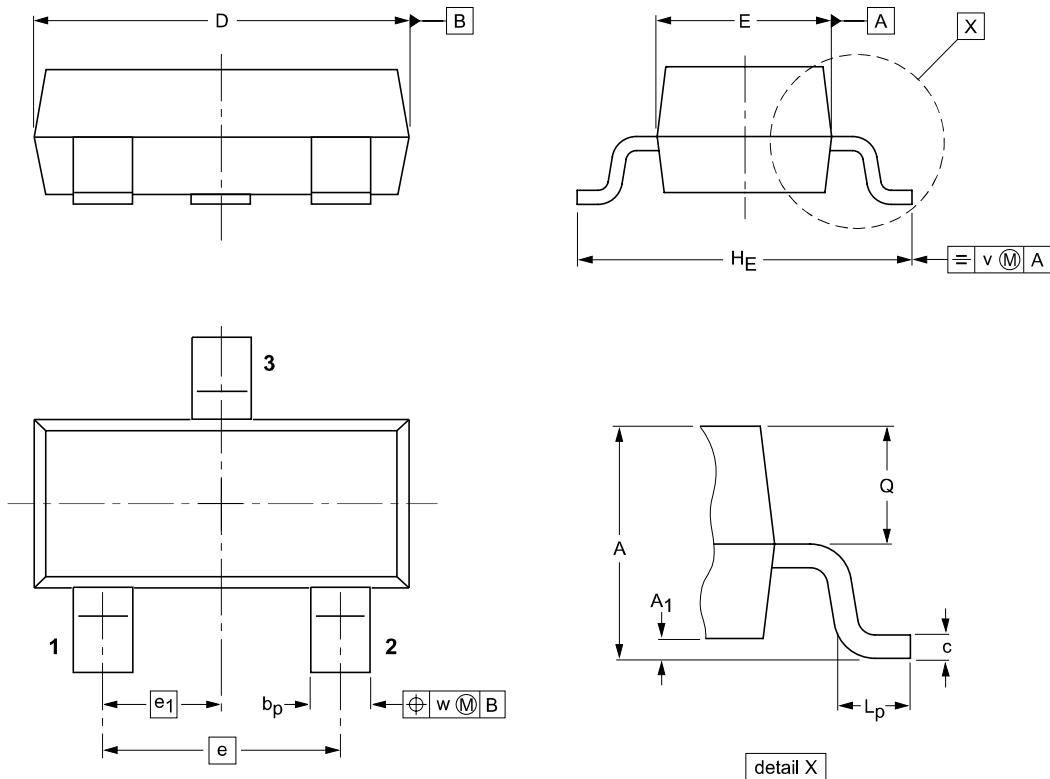
Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V _{CE} = 1 V, I _C = 100 mA	h _{FE}	150	-	-	-
Collector Cutoff Current at V _{CB} = 20 V	I _{CB0}	-	-	100	nA
Emitter Cutoff Current at V _{EB} = 6 V	I _{EBO}	-	-	100	nA
Collector Base Breakdown Voltage at I _C = 50 μA	V _{(BR)CBO}	20	-	-	V
Collector Emitter Breakdown Voltage at I _C = 1 mA	V _{(BR)CEO}	15	-	-	V
Emitter Base Breakdown Voltage at I _E = 50 μA	V _{(BR)EBO}	6.5	-	-	V
Collector Emitter Saturation Voltage at I _C = 500 mA, I _B = 50 mA	V _{CE(sat)}	-	-	0.3	V
Transition Frequency at V _{CE} = 5 V, I _C = 50 mA	f _T	-	260	-	MHz
Output Capacitance at V _{CB} = 10 V, f = 1 MHz	C _{OB}	-	5	-	pF



Package Outline

SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1