

NPN Silicon Epitaxial Planar Transistor

SOT-23

Features

Mechanical Data

• Marking: 495

Case:Molded Plastic,SOT-23

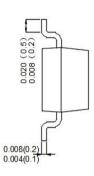
Mounting Position : Any.Equivalent Circuit:

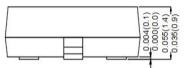
• Epoxy:UL 94V-0 rate flame retardant

• Terminals:Plated Leads Solderable perMIL-STD-750,Method-2026.

Medium Power High Performance Transistor

0.020 (0.5) 0.012 (0.3)





Dimensions in inches and (millimeters)

Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	170	V
Collector Emitter Voltage	V _{CEO}	150	V
Emitter Base Voltage	V _{EBO}	5	V
Collector Current	Ι _C	1	А
Peak Pulse Current	I _{CM}	2	А
Power Dissipation	P _{tot}	200	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C



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Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

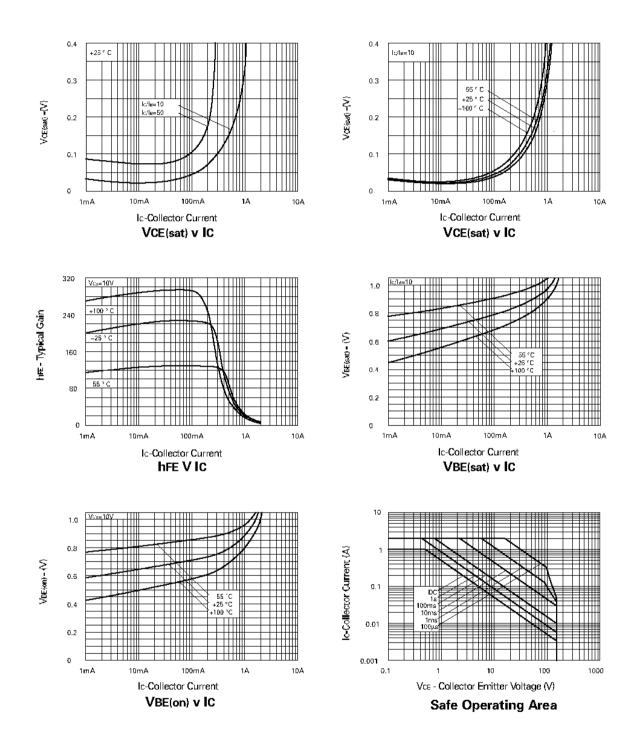
Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 10 \text{ V}$, $I_C = 1 \text{ mA}$ at $V_{CE} = 10 \text{ V}$, $I_C = 250 \text{ mA}$ at $V_{CE} = 10 \text{ V}$, $I_C = 500 \text{ mA}$	h _{FE} h _{FE}	100 100 50	- 300	-
at $V_{CE} = 10 \text{ V}, I_C = 1 \text{ A}$	h _{FE} h _{FE}	10	-	-
Collector Base Cutoff Current at V_{CB} = 150 V	I _{CBO}	-	100	nA
Collector Emitter Cutoff Current at V_{CE} = 150 V	I _{CES}	-	100	nA
Emitter Base Cutoff Current at V _{EB} = 4 V	I _{EBO}	-	100	nA
Collector Base Breakdown Voltage at I _c = 100 μA	V _{(BR)CBO}	170	-	V
Collector Emitter Breakdown Voltage at I _C = 10 mA	V _{(BR)CEO}	150	-	V
Emitter Base Breakdown Voltage at I _E = 100 μA	V _{(BR)EBO}	5	-	V
Collector Emitter Saturation Voltage at $I_C = 250$ mA, $I_B = 25$ mA at $I_C = 500$ mA, $I_B = 50$ mA	V _{CEsat}	-	0.2 0.3	V
Base Emitter Saturation Voltage at $I_C = 500$ mA, $I_B = 50$ mA	V _{BEsat}	-	1	V
Base Emitter On Voltage at $V_{CE} = 10$ V, $I_C = 500$ mA	$V_{BE(on)}$	-	1	V
Transition Frequency at $V_{CE} = 10 \text{ V}, \text{ I}_{C} = 50 \text{ mA}, \text{ f} = 100 \text{ MHz}$	f _T	100	-	MHz
Collector Output Capacitance at $V_{CB} = 10 \text{ V}, \text{ f} = 1 \text{ MHz}$	C _{ob}	-	10	pF



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Rating And Characteristic Curves



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