



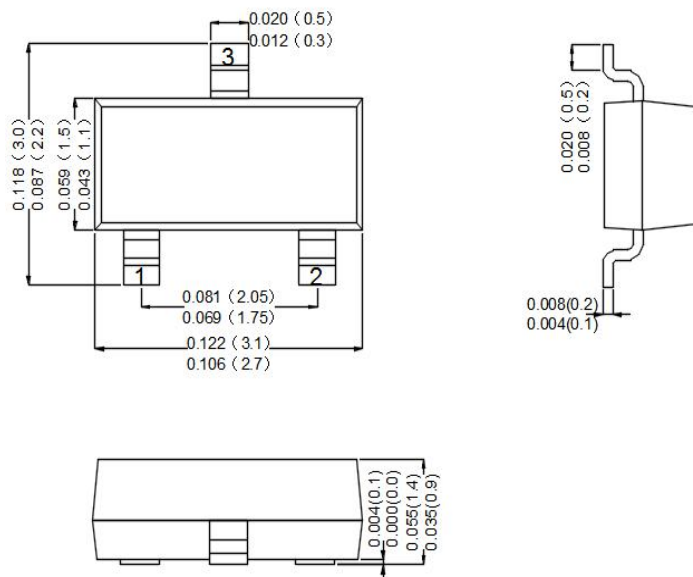
Features

- For switching and amplifier applications
- low power output stages

SOT-23

Mechanical Data

- Case: Molded Plastic, SOT-23
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Plated Leads Solderable per MIL-STD-750, Method-2026.
- Marking: 28S
- Mounting Position : Any.
- Equivalent Circuit:



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}	40	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1	A
Peak Collector Current	I_{CM}	1.25	A
Base Current	I_B	100	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	-55 to +150	°C

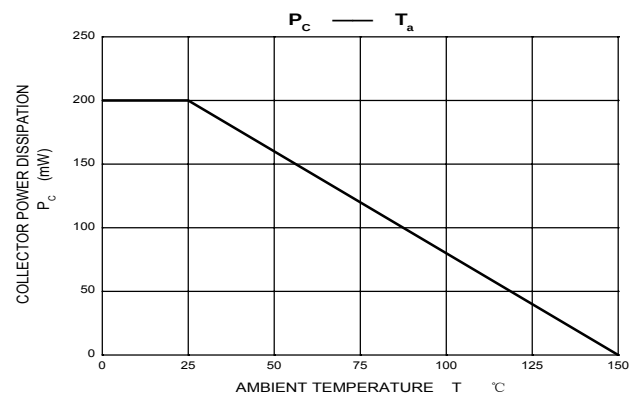
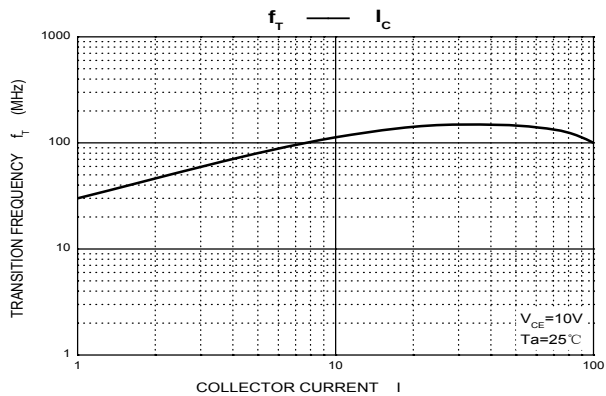
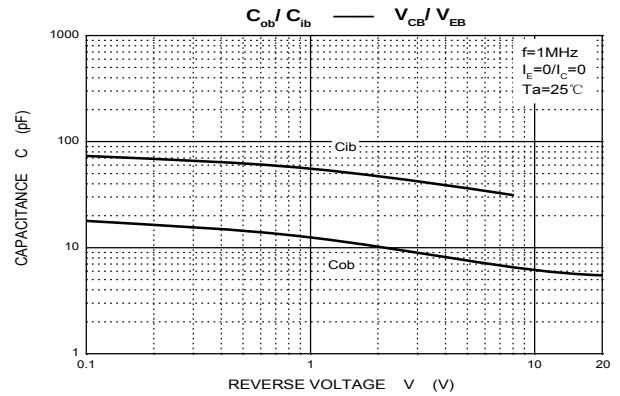
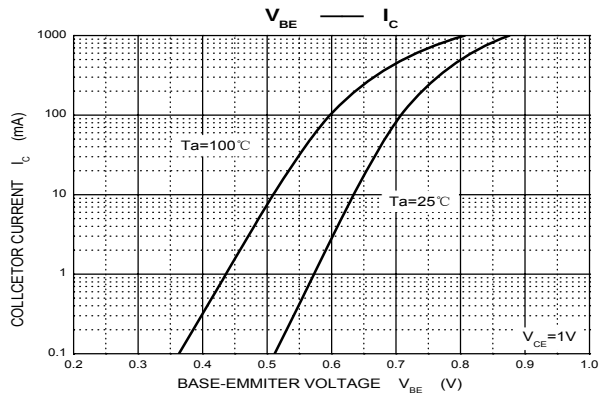
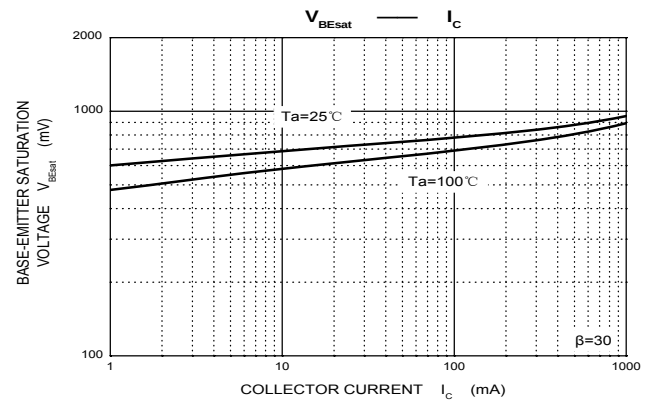
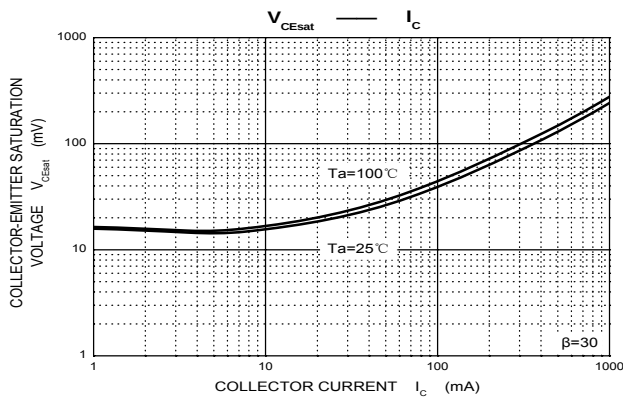
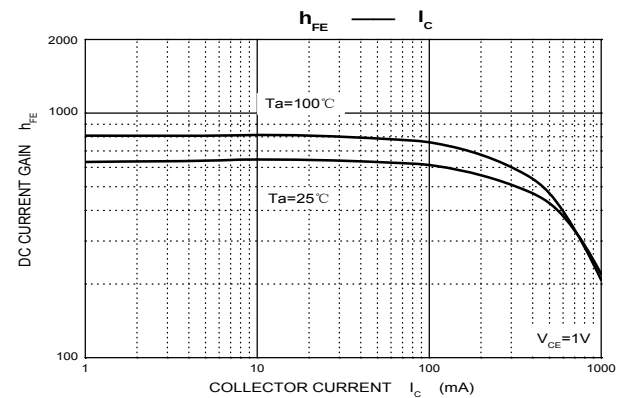
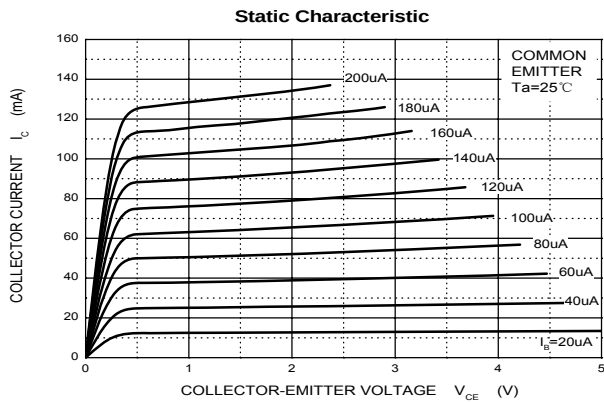


Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $V_{CE}=1V$, $I_C=5mA$	h_{FE}	45	-	-
at $V_{CE}=1V$, $I_C=100mA$	h_{FE}	200	1000	-
at $V_{CE}=1V$, $I_C=800mA$	h_{FE}	40	-	-
Collector Base Breakdown Voltage				
at $I_C=100\mu A$	$V_{(BR)CBO}$	40	-	V
Collector Emitter Breakdown Voltage				
at $I_C=2mA$	$V_{(BR)CEO}$	20	-	V
Emitter Base Breakdown Voltage				
at $I_E=100\mu A$	$V_{(BR)EBO}$	6	-	V
Collector Cutoff Current				
at $V_{CB}=35V$	I_{CBO}	-	100	nA
Emitter Cutoff Current				
at $V_{BE}=6V$	I_{EBO}	-	100	nA
Collector Saturation Voltage				
at $I_C=600mA$, $I_B=20mA$	$V_{CE(sat)}$	-	0.55	V
Base Saturation Voltage				
at $I_C=600mA$, $I_B=20mA$	$V_{BE(sat)}$	-	1.2	V
Base Emitter Voltage				
at $I_C=10mA$, $V_{CE}=1V$	V_{BE}	-	1.0	V
Gain Bandwidth Product				
at $V_{CE}=10V$, $I_C=50mA$	f_T	100	-	MHz
Collector Base Capacitance				
at $V_{CB}=10V$, $f=1MHz$	C_{OB}	-	9	pF



Rating And Characteristic Curves





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