

FEATURES

- Complementary to S9013
- Excellent h_{FE} linearity

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

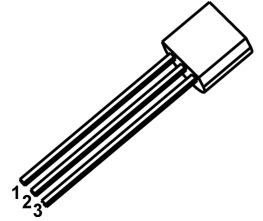
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Power Dissipation	625	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

TO-92

1. EMITTER

2. BASE

3. COLLECTOR



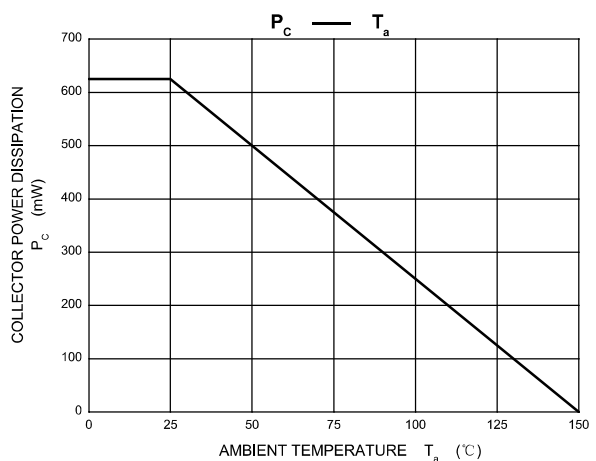
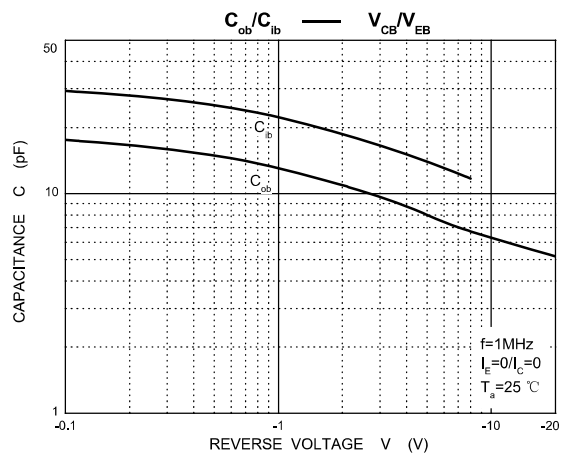
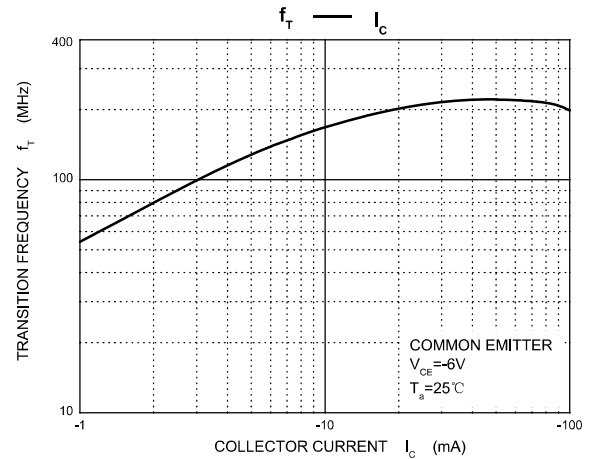
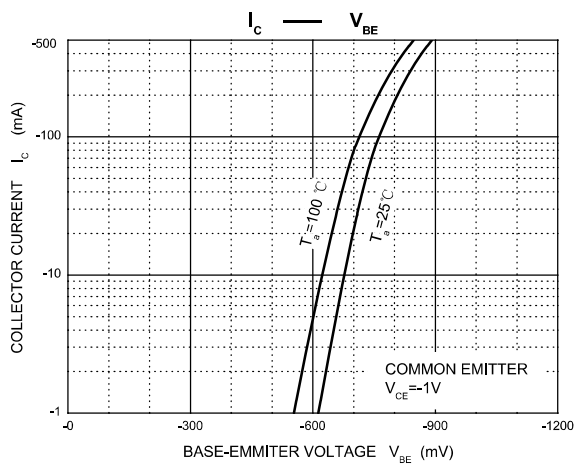
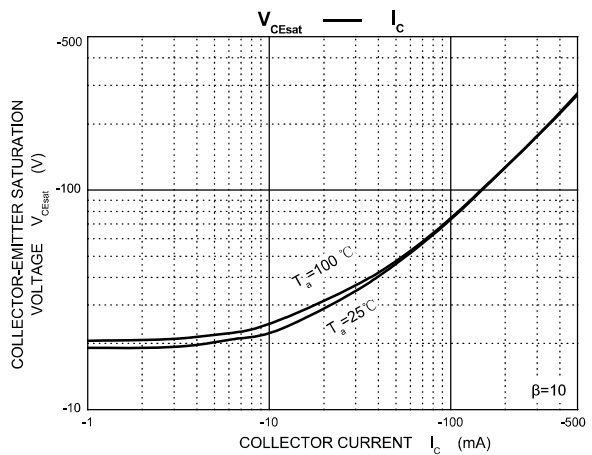
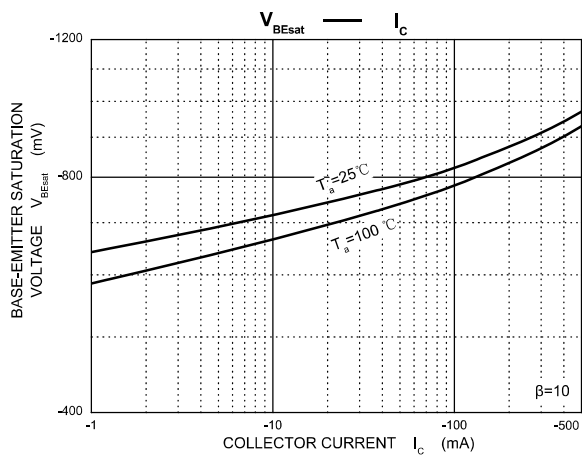
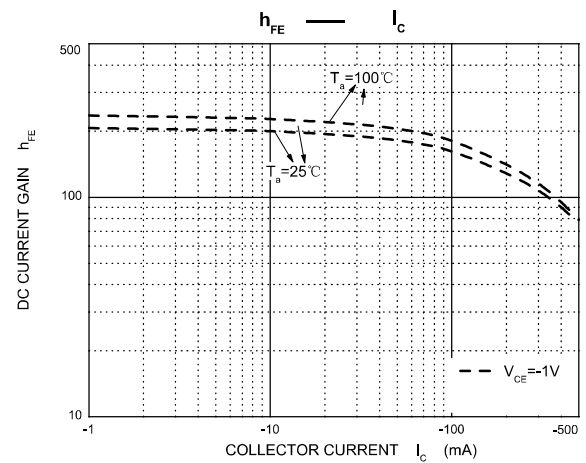
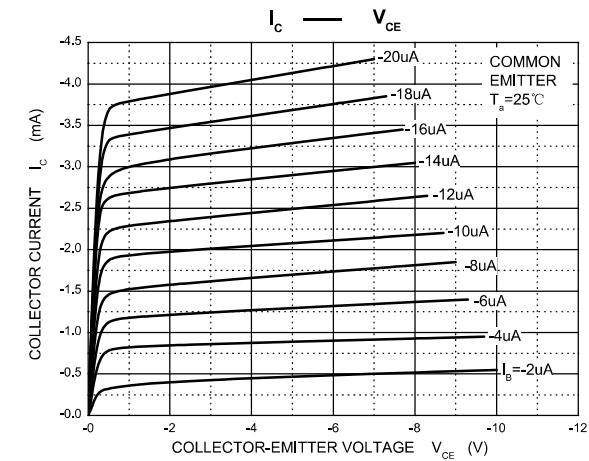
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}$, $I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}$, $I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}$, $I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\text{V}$, $I_E = 0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20\text{V}$, $I_B = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -1\text{V}$, $I_C = -50\text{mA}$	64		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$			-1.2	V
Transition frequency	f_T	$V_{CE} = -6\text{V}$, $I_C = -20\text{mA}$ $f = 30\text{MHz}$	150			MHz

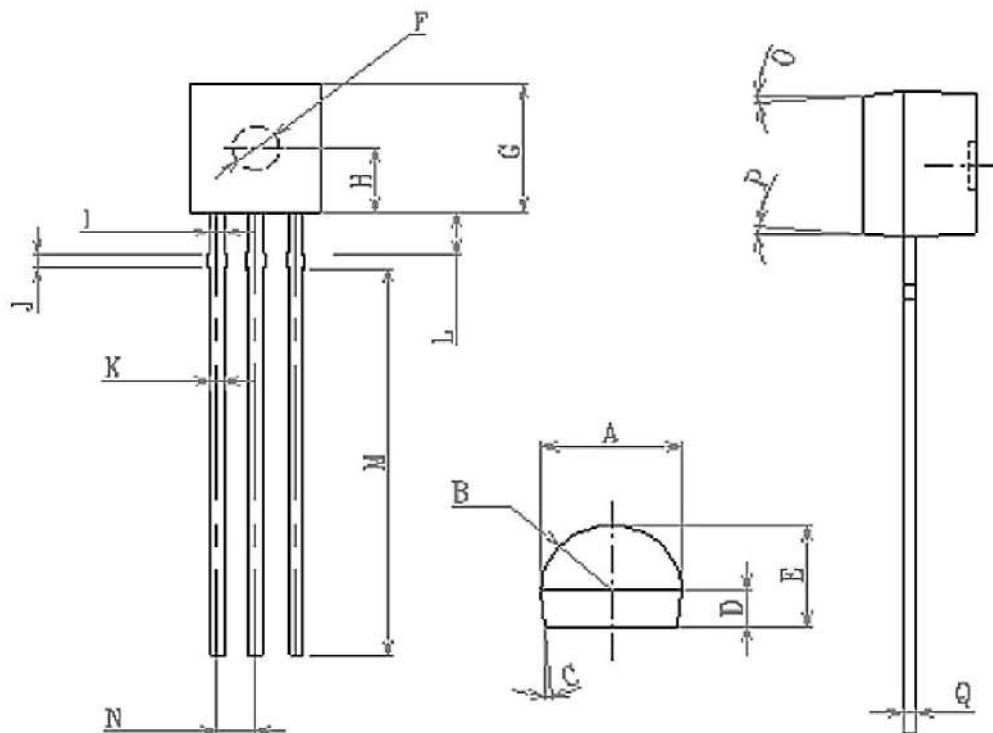
CLASSIFICATION OF h_{FE}

Rank	D	E	F	G	H	I	J
Range	64-91	78-112	96-135	112-166	144-202	190-300	300-400

Typical Characteristics



TO-92 Package Outline Dimensions



SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A	4.1	4.3	K	0.36	0.56
B	R2.0	R2.2	L	1.35	1.45
C	4.1		M	12.00	12.5
D	1.1	1.2	N	1.24	1.3
E	3.13	3.33	O	5°	
F	Φ 1.48	Φ 1.52	P	5°	
G	4.4	4.6	Q	0.37	0.39
H	2.2	2.3			
I	0.36	0.56			
J	0.5	0.6			

单位: mm