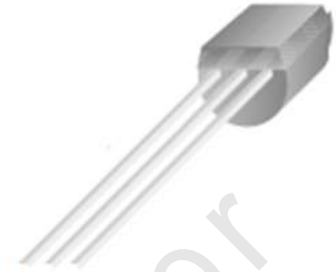


FEATURES

- Epitaxial planar die construction.
- Complementary PNP type available (2N5401).
- Also available in lead free version.

APPLICATIONS

- Ideal for medium power amplification and switching.



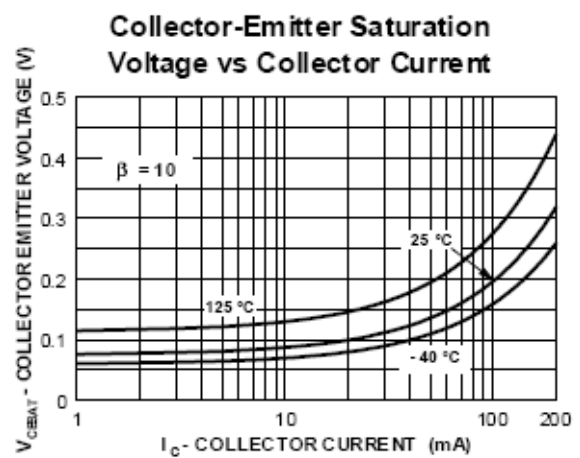
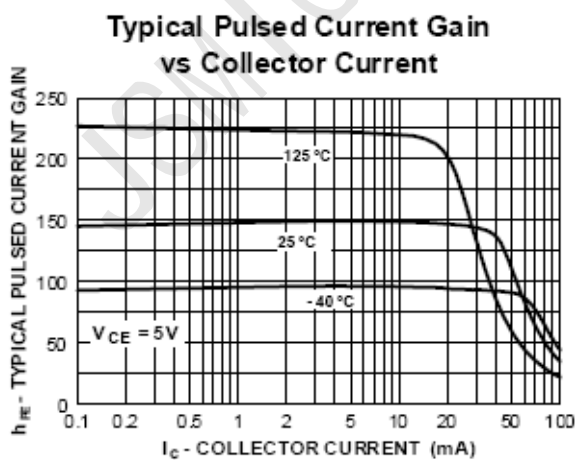
1. Emitter 2. Base 3. Collector

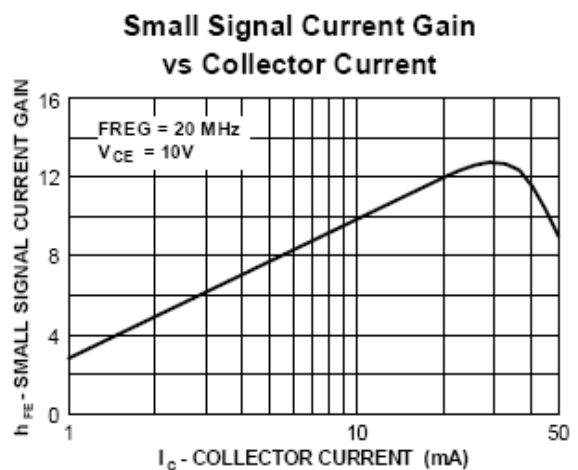
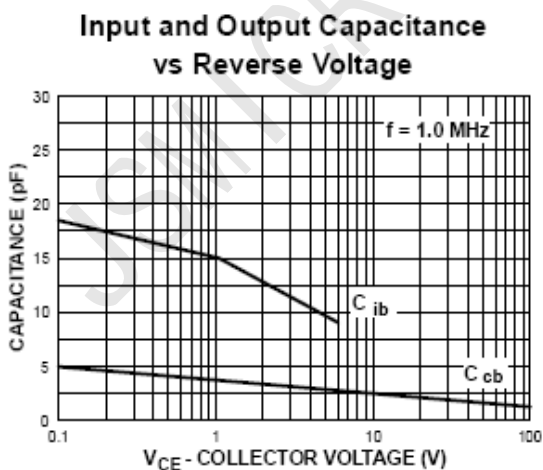
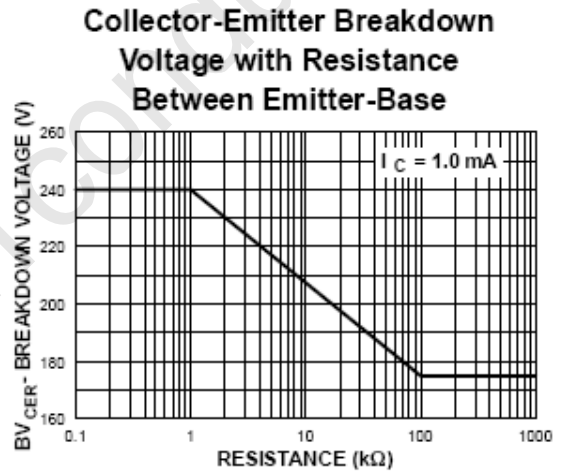
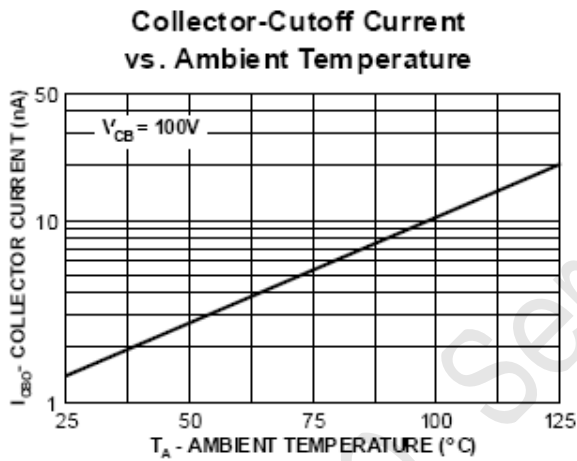
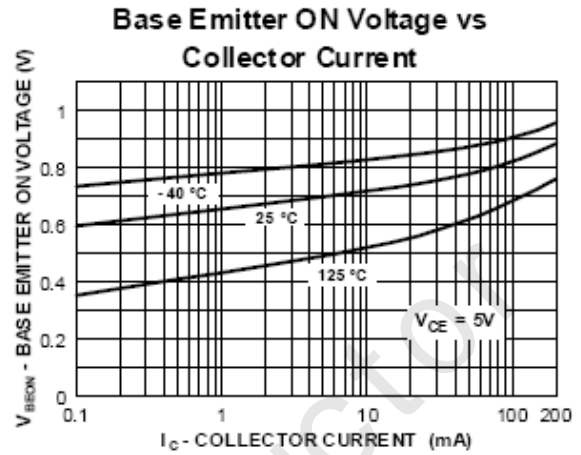
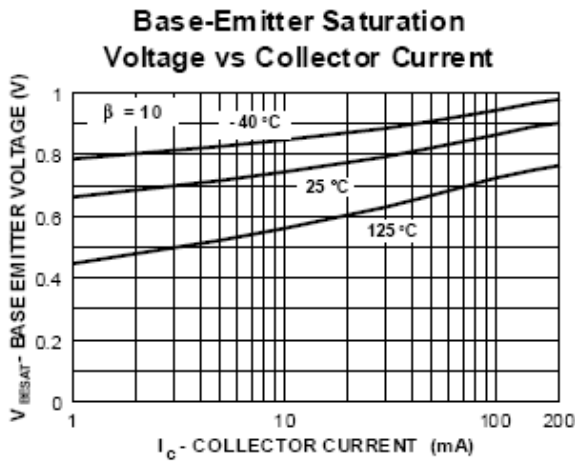
MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	UNIT
V _{CBO}	collector-base voltage	180	V
V _{CEO}	collector-emitter voltage	160	V
V _{EBO}	emitter-base voltage	6	V
I _C	collector current (DC)	0.6	A
P _C	Collector dissipation	0.35	W
R _{θJA}	Thermal resistance, Junction to ambient	357	°C/W
T _j , T _{stg}	junction and storage temperature	-55 to +150	°C

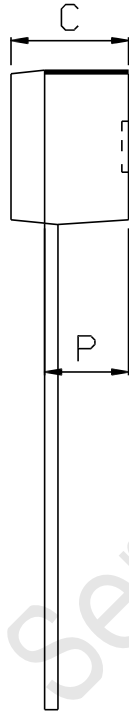
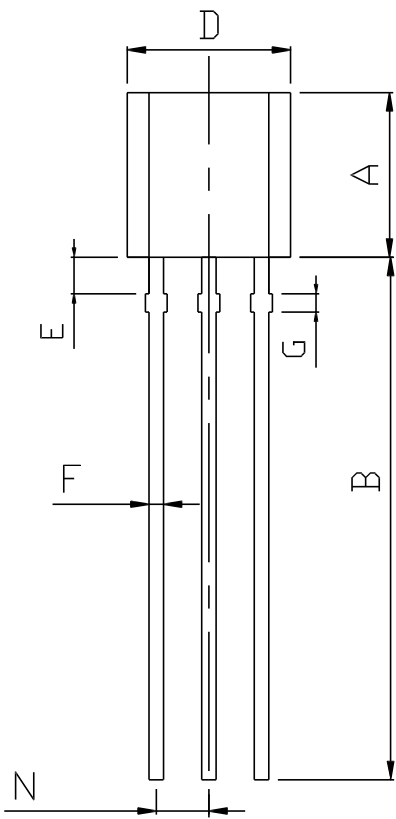
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Symbol	Parameter	Test conditions	MIN.	MAX.	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	180		
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=0.1mA, I_B=0$	160		
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu A, I_C=0$	6		
I_{CBO}	collector cut-off current	$I_E = 0; V_{CB} = 120V$	-	50	nA
I_{EBO}	emitter cut-off current	$I_C = 0; V_{EB} = 4V$	-	50	nA
h_{FE}	DC current gain	$V_{CE} = 5V; I_C = 1mA$ $V_{CE} = 5V; I_C = 10mA$ $V_{CE} = 5V; I_C = 50mA$	80 100 30	- 300 -	
$V_{CE(sat)}$	collector-emitter saturation voltage	$I_C = 10mA; I_B=1mA$ $I_C = 50mA; I_B = 5mA$	-	0.15 0.2	V
$V_{BE(sat)}$	base-emitter saturation voltage	$I_C=10mA; I_B=1mA$ $I_C=50mA; I_B=5mA$	-	1 1	V
f_T	transition frequency	$I_C=10mA; V_{CB}=10V;$ $f=100MHz$	100	300	MHz
C_{obo}	Output capacitance	$I_E=10mA; V_{CE} = 10V;$ $f=1.0MHz$		6.0	pF

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified




PACKAGE OUTLINE



DIM	MILLIMETERS
A	4.55+0.20
B	14.50±0.30
C	3.54±0.20
D	4.56±0.20
E	1.30±0.20
F	0.46±0.20
G	0.50±0.10
H	0.32±0.10
N	1.30±0.20
P	2.52±0.20

(Units: mm)

