

Product Summary

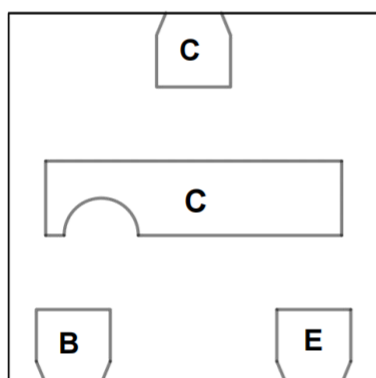
- $BVCBO \geq -80V (I_C = -100\mu A)$
- $BVCEO \geq -65V (I_C = -2mA)$
- $I_C = -100mA$

Features

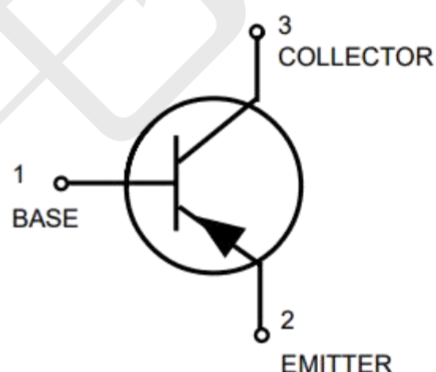
- Consumer electronics
- Voltage switching
- High DC Current Gain
- Space restricted applications

Circuit diagram and pin information

Transparent top view



DFN1X1-3



Absolute Maximum Ratings

($T_a = 25^\circ C$ unless otherwise specified)

PARAMETER	SYMBOL	LIMIT	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-65	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current (DC)	I_C	-100	mA
Collector Peak Current (Pulse) Single pulse, $P_w \leq 380\mu s$, Duty $\leq 2\%$	I_{CM}	-200	mA
Power Total Dissipation @ $T_A = 25^\circ C$	P_D	340	mW
Maximum Operating Junction Temperature	T_J	+150	$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics

(TA=25°C unless otherwise specified)

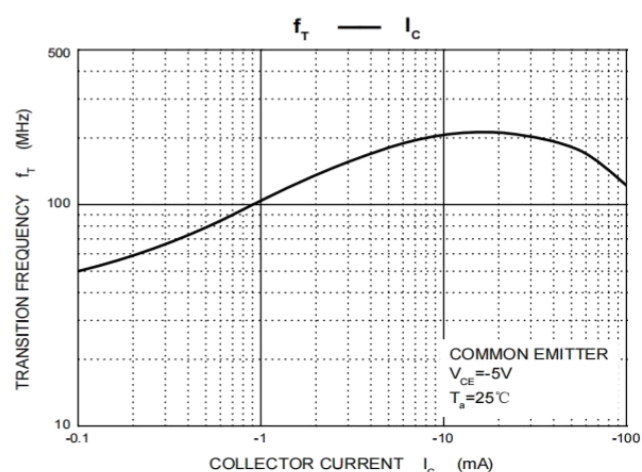
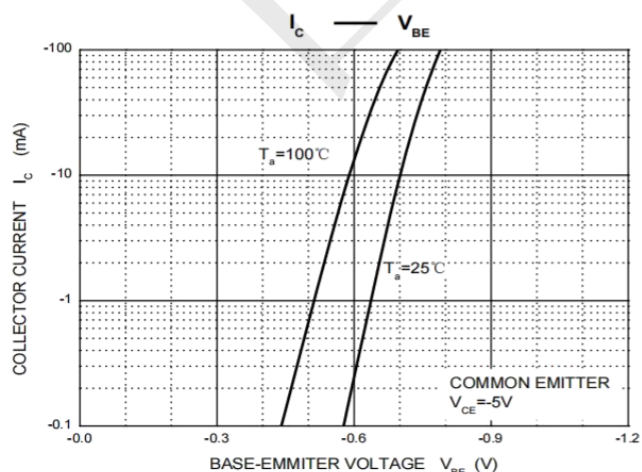
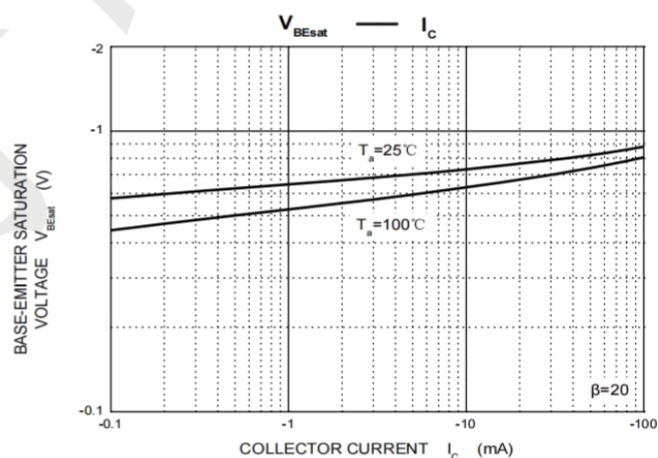
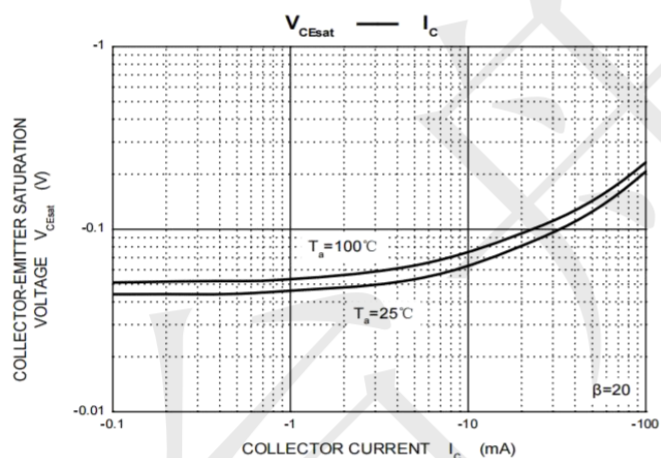
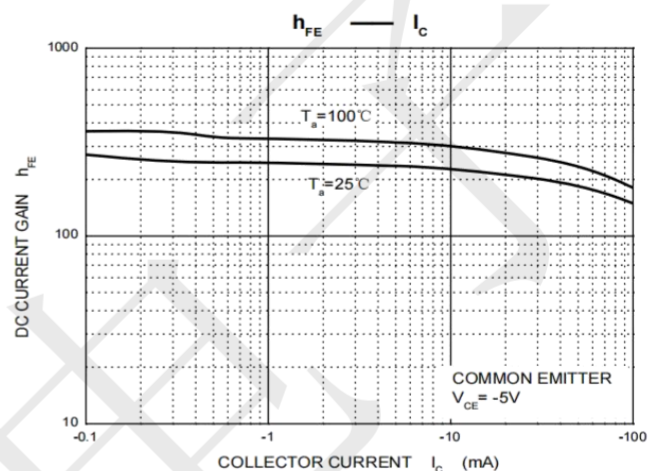
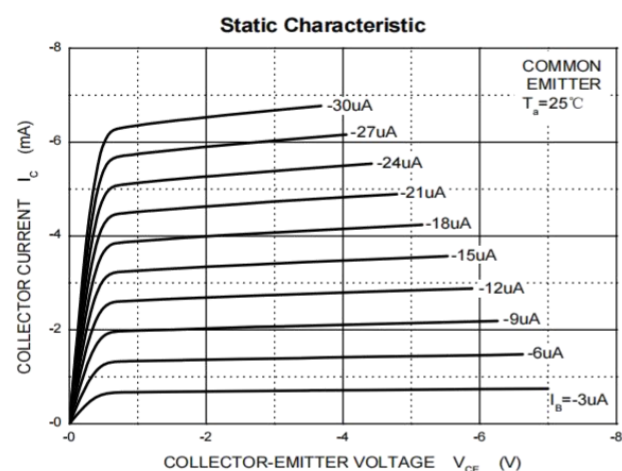
PARAMETER	CONDITIONS	SYMBOL	MIN	TYP	MAX	UNIT
Static (Note 1)						
Collector-Base Breakdown Voltage	$I_C = -100\mu A, I_E = 0$	BV_{CBO}	-80	--	--	V
Collector-Emitter Breakdown Voltage	$I_C = -2mA, I_B = 0$	BV_{CEO}	-65	--	--	V
Emitter-Base Breakdown Voltage	$I_E = -100\mu A, I_C = 0$	BV_{EBO}	-6	--	--	V
Collector Cutoff Current	$V_{CB} = -50V, I_E = 0$	I_{CBO}	--	--	-100	nA
Emitter Cutoff Current	$V_{EB} = -5V, I_C = 0$	I_{EBO}	--	--	-100	nA
Collector-Emitter Saturation Voltage	$I_C = -100mA, I_B = -5mA$	$V_{CE(SAT)}$	--	--	-0.65	V
Base-Emitter Saturation Voltage	$I_C = -100mA, I_B = -5mA$	$V_{BE(SAT)}$	--	0.85	--	V
DC Current Transfer Ratio	$V_{CE} = -5V, I_C = -1mA$	h_{FE}	220	--	475	
Dynamic (Note 2)						
Transition Frequency	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$	f_T	100	--	--	MHz
Collector Output Capacitance	$V_{CB} = -10V, I_E = 0A, f = 1MHz$	C_{ob}	--	2	--	pF

Note:

1. Pulse test: $\leq 380\mu s$, duty cycle $\leq 2\%$

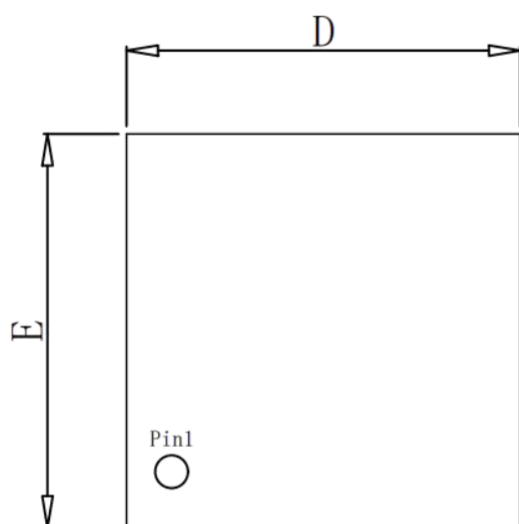
2. For DESIGN AID ONLY, not subject to production testing

Typical Performance Characteristics($T_A=25^\circ\text{C}$)

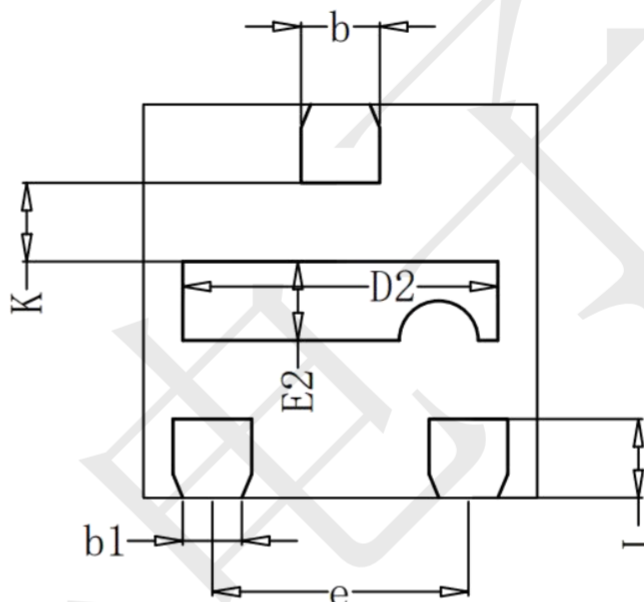


Package Outline Dimensions

DFN1111-3



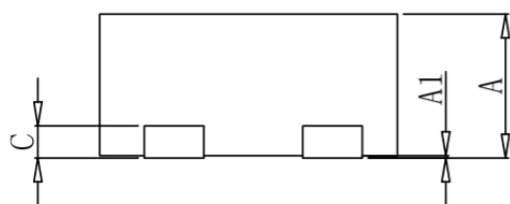
Top View



Bottom View



Side View



Side View

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	--	0.02	0.05
b	0.15	0.20	0.25
b1	0.150 REF.		
c	0.100 REF.		
D	0.95	1.00	1.05
D2	0.75	0.80	0.85
e	0.65 BSC		
E	0.95	1.00	1.05
E2	0.15	0.20	0.25
L	0.15	0.20	0.25
K	0.20 TYP		