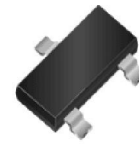


WPT2F55

PNP, General Purpose Transistors

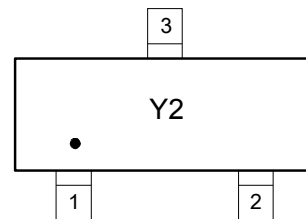
Descriptions

The WPT2F55 is designed for general purpose amplifier applications. Standard products are Pb-free and Halogen-free.



SOT-23

(Top View)



Marking :Y2

- 1: BASE**
- 2: EMITTER**
- 3: COLLECTOR**

Features

- Complimentary to WNT2F50
- Collector Current: $I_c = -0.5A$

Order information

Device	Package	Shipping
WPT2F55-3/TR	SOT-23	3000/Reel&Tape

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Collector-emitter Voltage	V_{CEO}	-25	V
Collector-base Voltage	V_{CBO}	-40	V
Emitter-base Voltage	V_{EBO}	-6	V
Continues Collector Current	I_C	-500	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Electronics Characteristics ($T_a=25^\circ\text{C}$, unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage	BV_{CEO}	$I_C=-2\text{mA}, I_B=0\text{mA}$	-25			V
Collector-base breakdown voltage	BV_{CBO}	$I_C=-100\mu\text{A}, I_E=0\text{mA}$	-40			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E=-100\mu\text{A}, I_C=0\text{mA}$	-5			V
Collector cutoff current	I_{CEO}	$V_{CE}=-20\text{V}, I_B=0\text{A}$			-100	nA
Collector cutoff current	I_{CBO}	$V_{CB}=-35\text{V}, I_E=0\text{A}$			-100	nA
Emitter cutoff current	I_{EBO}	$V_{EB}=-6\text{V}, I_C=0\text{A}$			-100	nA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$		-0.28	-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$		-0.98	-1.2	V
DC current gain	$h_{FE(1)}$	$I_C=-100\text{mA}, V_{CE}=-1\text{V}$	120		400	
	$h_{FE(1)}$	$I_C=-500\text{mA}, V_{CE}=-1\text{V}$	40	80		
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-50\text{mA}, f=30\text{MHz}$	100	200		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H	J
Range	120-200	200-350	300-400

Typical characteristics (Ta=25°C, unless otherwise noted)

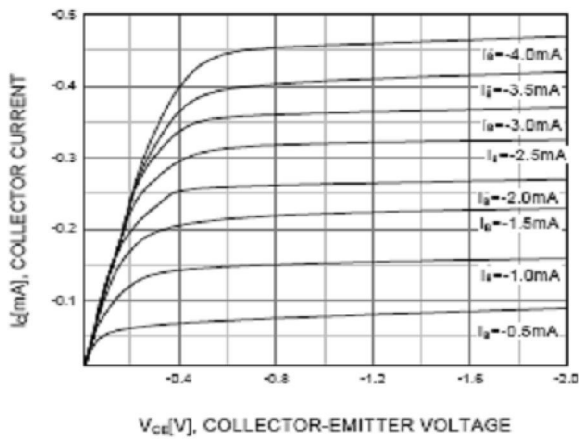


Figure 1. Static Characteristic

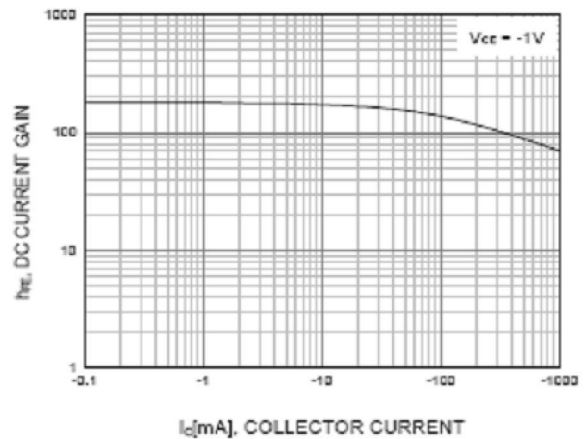


Figure 2. DC current Gain

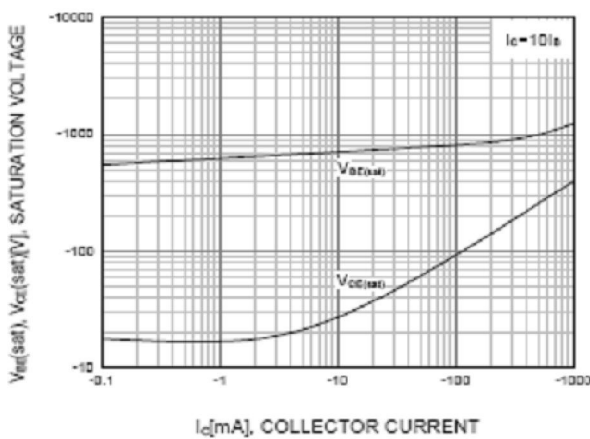


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

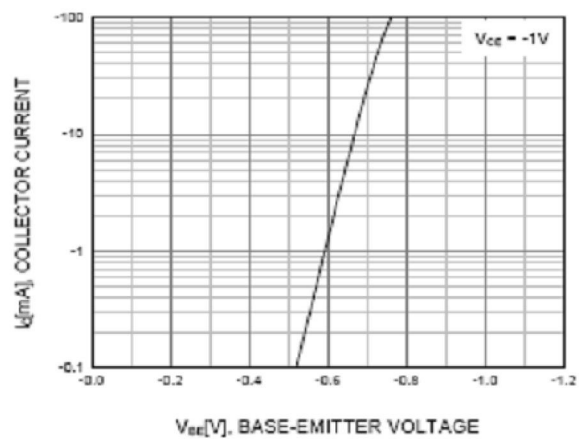


Figure 4. Base-Emitter On Voltage

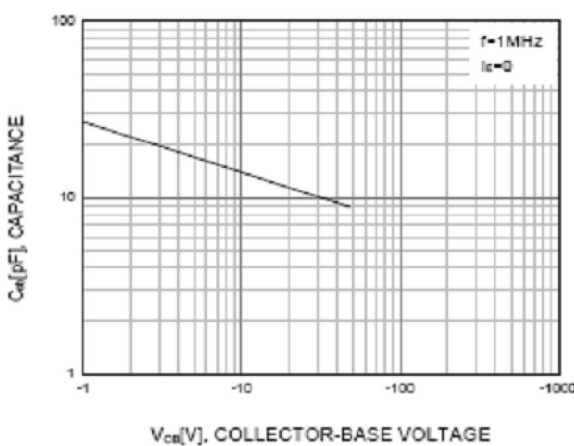


Figure 5. Collector Output Capacitance

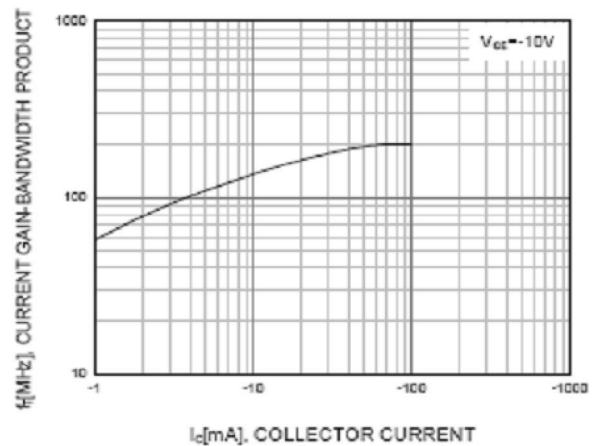
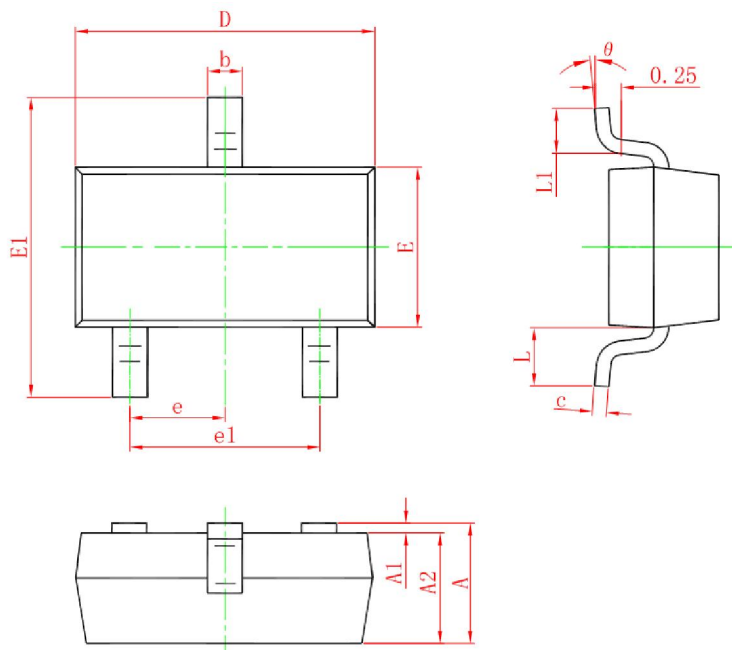


Figure 6. Current Gain Bandwidth Product

Package outline dimensions

SOT-23



Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.900	1.025	1.150
A1	0.000	0.500	0.100
A2	0.900	0.975	1.050
b	0.300	0.400	0.500
c	0.080	0.115	0.150
D	2.800	2.900	3.000
E	1.200	1.300	1.400
E1	2.250	2.400	2.550
e	0.950TYP		
e1	1.800	1.900	2.000
L	0.500REF		
L1	0.300	0.400	0.500
θ	0°	4°	8°

Recommend PCB Layout (Unit: mm)

