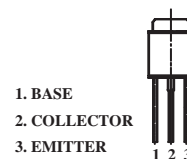


PNP Epitaxial Planar Transistors

(Pb) Lead(Pb)-Free



TO-251

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Rating	Symbol	PNP/WTP772	Unit
Collector-Emitter Voltage	V _{CEO}	-30	V
Collector-Base Voltage	V _{CBO}	-40	V
Emitter-Base Voltage	V _{EBO}	-5.0	V
Collector Current (DC)	I _{C(DC)}	-3.0	A
Collector Current (Pulse) ¹	I _{C(Pulse)}	-7.0	A
Base Current	I _{B(Pulse)}	-0.6	A
Total Device Dissipation T _c =25°C T _A =25°C	P _D	10 1.4	W
Junction Temperature	T _j	150	°C
Storage, Temperature	T _{stg}	-55 to +150	°C

Device Marking

WTP772 = 772

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage (I _C = -10 mA, I _B =0)	V _{(BR)CEO}	-30	-	V
Collector-Base Breakdown Voltage (I _C = -100 μA, I _E =0)	V _{(BR)CBO}	-40	-	V
Emitter-Base Breakdown Voltage (I _E = -100 μA, I _C =0)	V _{(BR)EBO}	-5.0	-	V
Collector Cutoff Current (V _{CB} = -30 V, I _E =0)	I _{CBO}	-	-1.0	μA
Emitter Cutoff Current (V _{EB} = -3.0 V, I _C =0)	I _{EBO}	-	-1.0	μA

NOTE: 1. PW ≤ 380 μs, duty cycle ≤ 2%

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted) (Continued)

Characteristics	Symbol	Min	TYP	Max	Unit
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ON CHARACTERISTICS

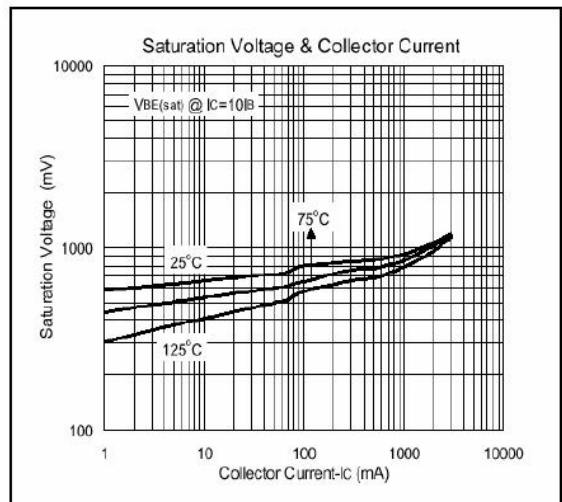
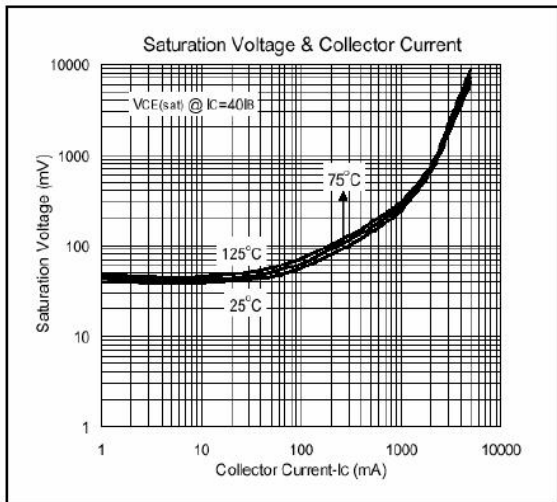
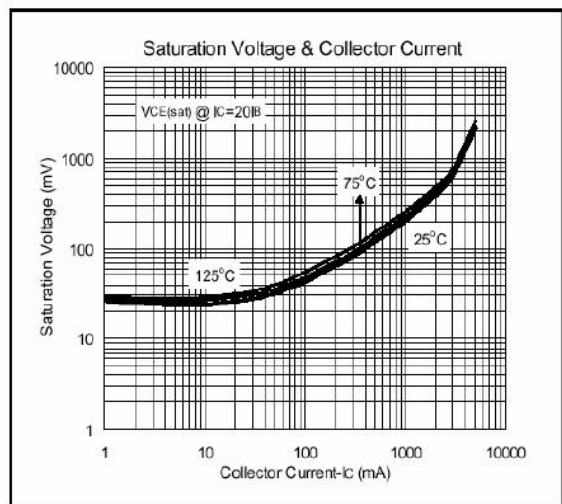
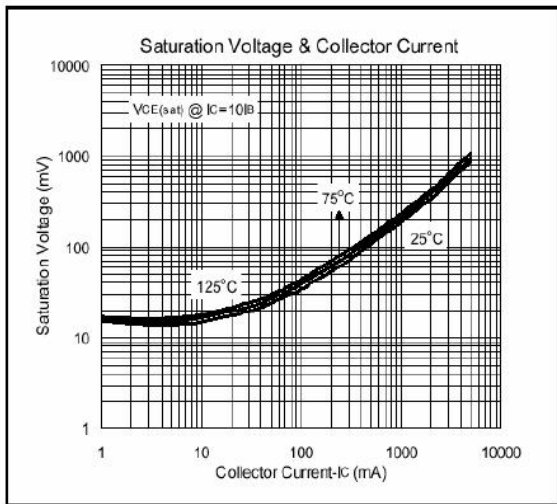
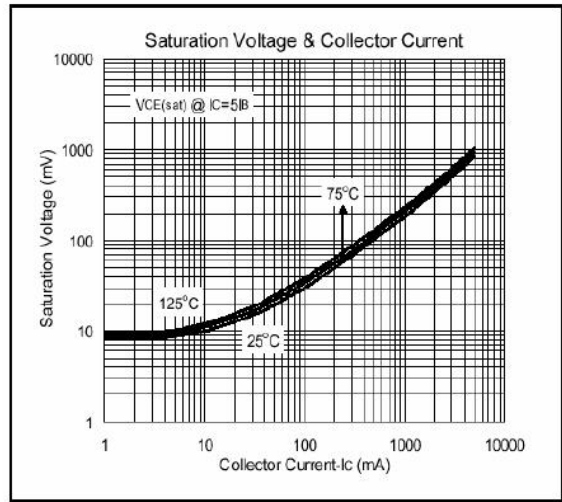
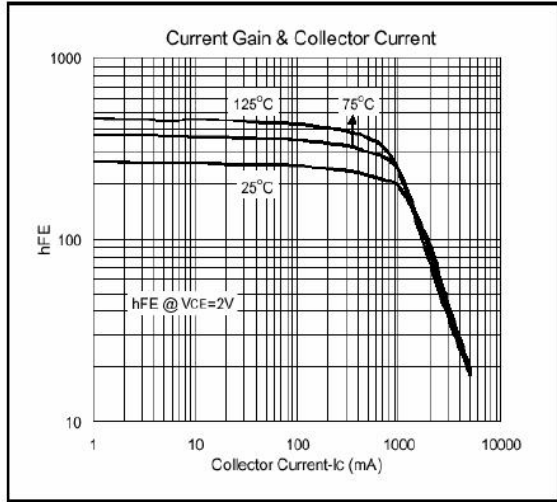
DC Current Gain ($I_C = -1.0\text{A}, V_{CE} = -2.0\text{V}$)	$h_{FE(1)}$	100	-	500	-
DC Current Gain ($I_C = -20\text{mA}, V_{CE} = -2.0\text{V}$)	$h_{FE(2)}$	30	-	-	-
Collector-Emitter Saturation Voltage ($I_C = -2.0\text{A}, I_B = -0.2\text{mA}$)	$V_{CE(sat)}$	-	-0.3	-0.5	V
Base-Emitter Saturation Voltage ($I_C = -2.0\text{A}, I_B = -0.2\text{mA}$)	$V_{BE(sat)}$	-	-1.0	-2.0	V
Current-Gain-Bandwidth Product ($I_C = -0.1\text{mA}, V_{CE} = -5.0\text{V}, f = 100\text{MHz}$)	f_T	-	80	-	MHz
Output Capacitance ($V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$)	C_{ob}	-	55	-	pF

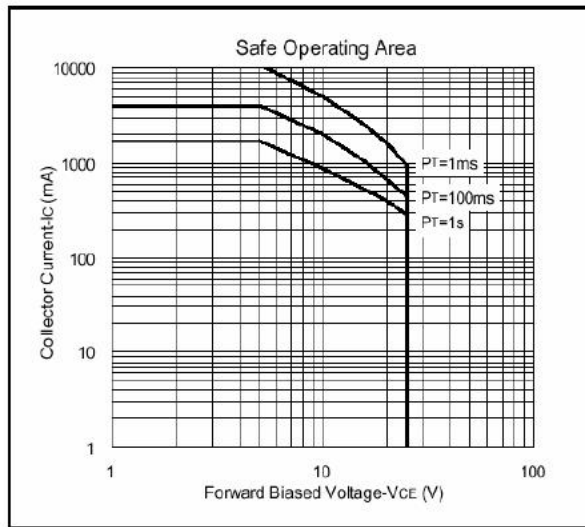
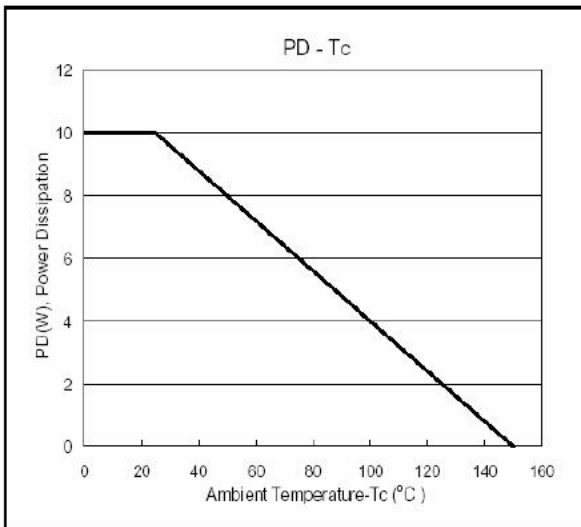
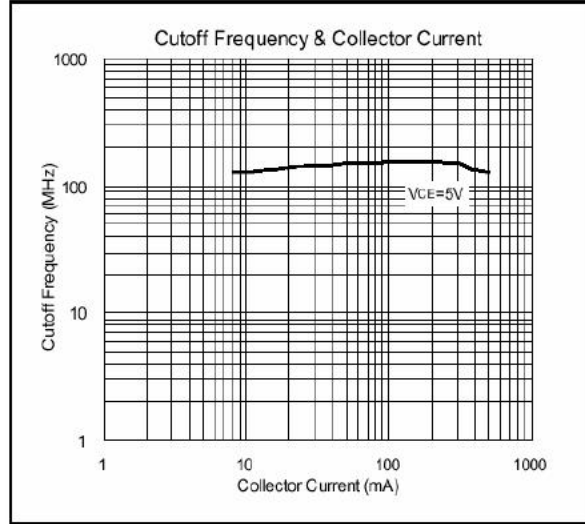
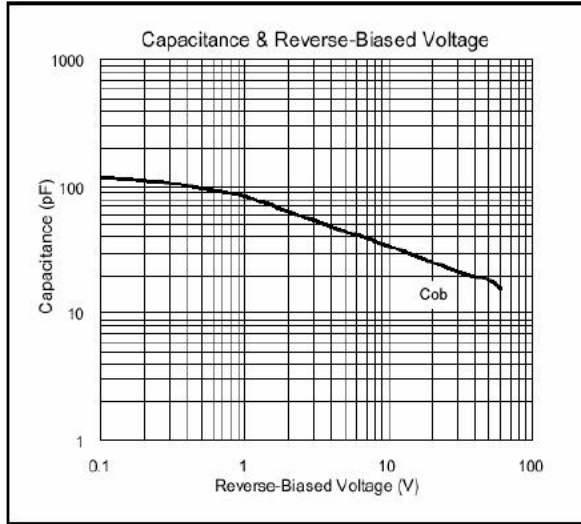
* Pulse Test: $PW \leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$.

Classification of $h_{FE(1)}$

Rank	Q	P	E
Range	100-200	160-320	250-500

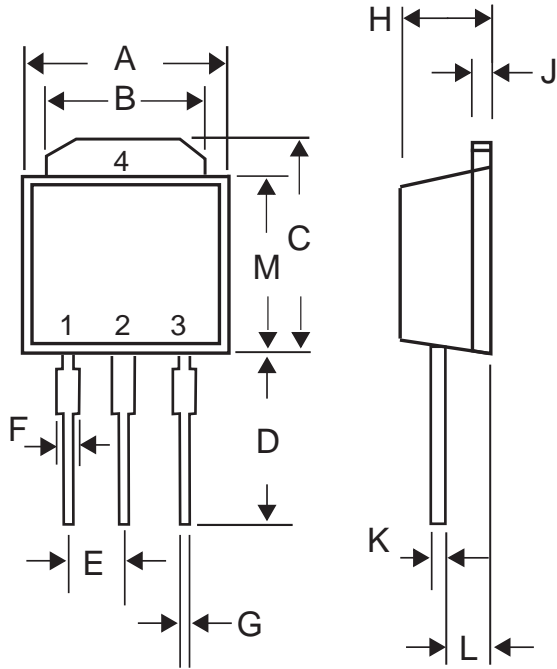
Characteristics Curve





TO-251 Outline Dimension & Marking

Unit:mm



TO-251		
Dim	Min	Max
A	6.40	6.80
B	5.20	5.50
C	6.80	7.20
D	7.20	7.80
E	2.30 REF.	
F	0.60	0.90
G	0.50	0.70
H	2.20	2.40
J	0.45	0.55
K	0.45	0.60
L	0.90	1.50
M	5.40	5.80

- 1. Base
- 2. Collector
- 3. Emitter