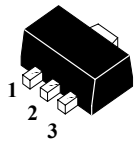
WEITRON

WTM3906

PNP EPITAXIAL PLANAR TRANSISTOR

Pb Lead(Pb)-Free

1. BASE
2. COLLECTOR
3. EMITTER



SOT-89

Features:

* Collector-Emitter Voltage:VCEO=-40V
* Complementary to WTM3904

Mechanical Data:

* Case : Molded Plastic

ABSOLUTE MAXIMUM RATINGS(T_A=25ºC Unless Otheerwise Noted)

Rating	Symbol	Value	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-40	V
Collector to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-200	mA
Total Device Disspation T_A=25°C	P_D	1.0	W
Junction Temperature	Tj	150	˚C
Storage Temperature	Tstg	-55 to +150	˚C

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage I_C=-100μA, I_E=0	BV_{CBO}	-40	-	-	V
Collector-Emitter Breakdown Voltage I_C=-1.0mA, I_B=0	BV_{CEO}	-40	-	-	V
Emitter-Base Breakdown Voltage I_E=-10μA, I_C=0	BV_{EBO}	-5.0	-	-	V
Collector Cut-Off Current V_{CE}=-30V, V_{BE}=-3.0V	I_{CEX}	-	-	-50	nA

ON CHARACTERISTICS[1]

DC Current Gain V_{CE}=-1.0V, I_C=-0.1mA V_{CE}=-1.0V, I_C=-1.0mA V_{CE}=-1.0V, I_C=-10mA V_{CE}=-1.0V, I_C=-50mA V_{CE}=-1.0V, I_C=-100mA	 $h_{FE(1)}$ $h_{FE(2)}$ $h_{FE(3)}$ $h_{FE(4)}$ $h_{FE(5)}$	 60 80 100 60 30	 - - - - -	 - - 300 - -	-
Collector-Emitter Saturation Voltage I_C=-10mA, I_B=-1.0mA I_C=-50mA, I_B=-5.0mA	$V_{CE(sat)}$	- -	- -	-250 -400	mV
Collector-Emitter Saturation Voltage I_C=-10mA, I_B=-1.0mA I_C=-50mA, I_B=-5.0mA	$V_{BE(sat)}$	-650 -	- -	-850 -950	mV

DYNAMIC CHARACTERISTICS

Transition Frequency V_{CE}=-20V, I_C=-10mA, f=100MHz	f_T	250	-	-	MHz
Output Capacitance V_{CB}=-5.0V, I_E=0, f=1.0MHz	C_{ob}	-	-	4.0	pF

Note1. Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

DEVICE MARKING

WTM3906=3906

Typical Characteristic

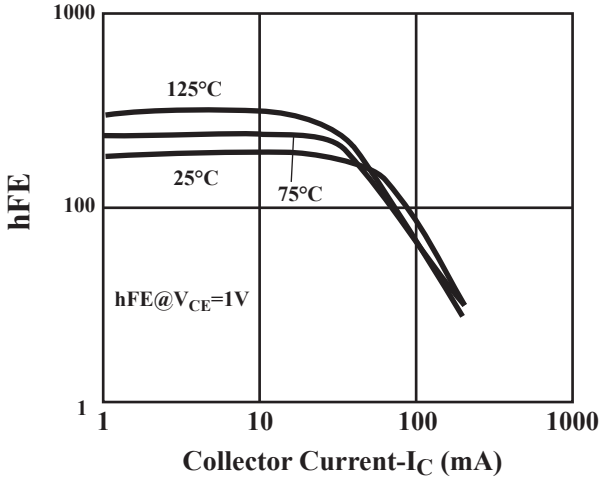


Fig.1 Current Gain & Collector Current

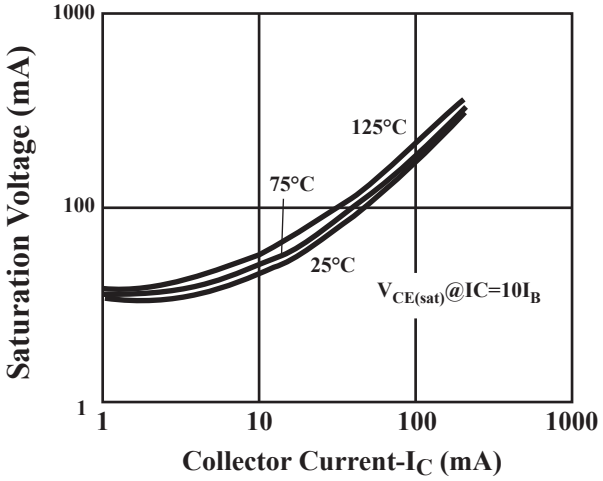


Fig.2 Saturation Volltage & Collector Current

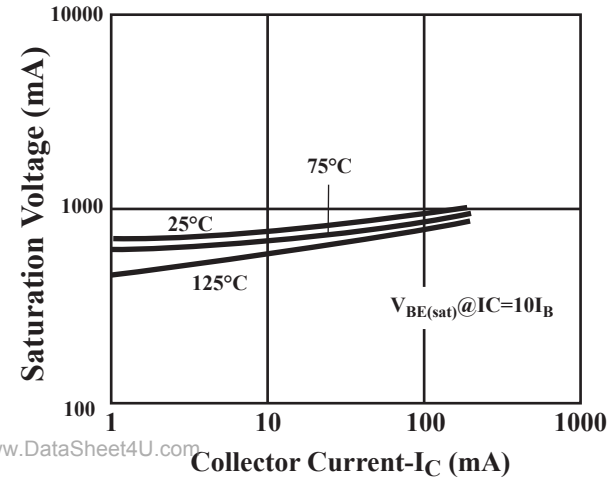


Fig.3 Saturation Volltage & Collector Current

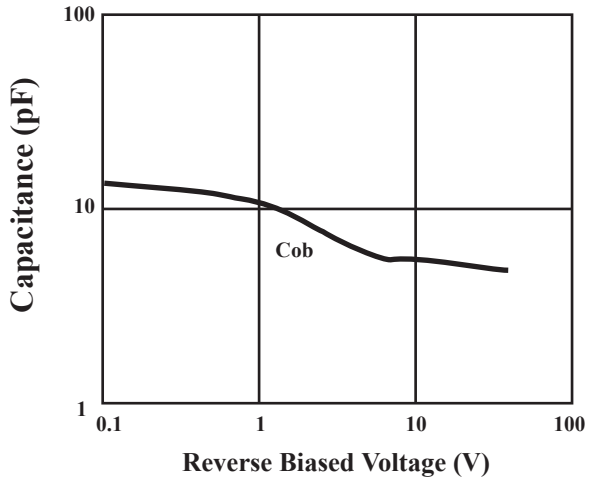


Fig.4 Capacitance & Reverse-Biased Voltage

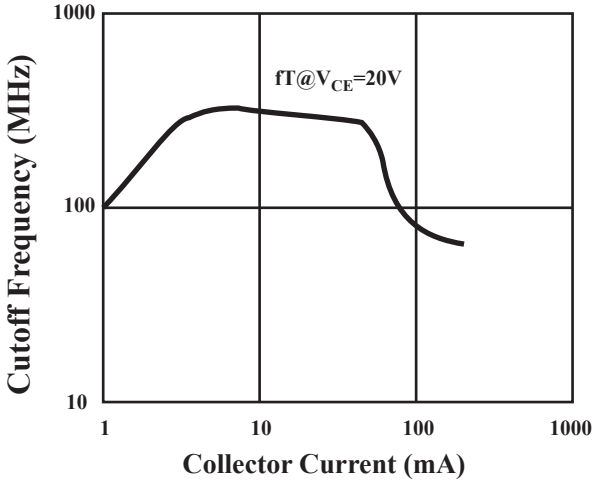


Fig.5 Cutoff Frequency & Collector Current

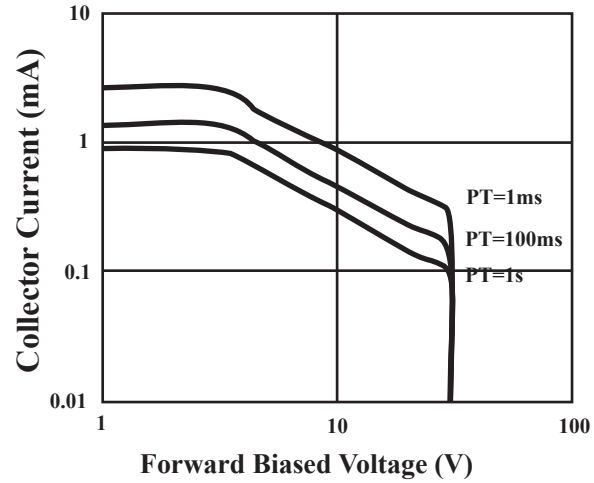
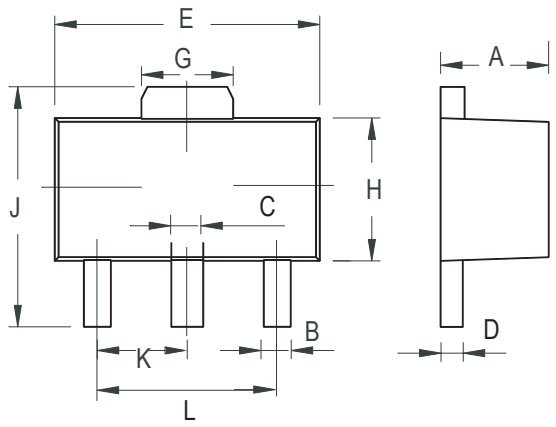


Fig.6 Safe Operating Area

SOT-89 Outline Dimensions

unit:mm



SOT-89		
Dim	**Min**	**Max**
A	1.400	1.600
B	0.320	0.520
C	0.360	0.560
D	0.350	0.440
E	4.400	4.600
G	1.400	1.800
H	2.300	2.600
J	3.940	4.250
K	1.500TYP	
L	2.900	3.100