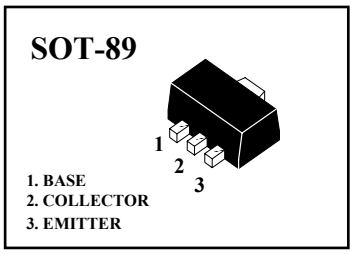
WEITRON

WTM2907A

PNP Epitaxial Planar Transistors

Lead(Pb)-Free



Features:

* Low Collector Saturation Voltage
* High Spwwd Switching
* For Complementary Use With NPN Type WTM2222A

ABSOLUTE MAXIMUM RATINGS (T_A=25˚C)

Rating	Symbol	Limits	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-0.6	A
Collector Power Dissipation	P_D	1.2	W
Junction Temperature	T_j	+150	˚C
Storage Temperature Range	T_{stg}	-55 to +150	˚C

Device Marking

WTM2907A = 2907A , p2F

ELECTRICAL CHARACTERISTICS(T_A=25˚Cunless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage I_C=-10μA, I_E=0	BV_{CBO}	-60	-	-	V
Collector-Emitter Breakdown Voltage I_C=-10mA, I_B=0	BV_{CEO}	-60	-	-	V
Emitter-Base Breakdown Voltage I_E=-10μA, I_C =0	BV_{EBO}	-5	-	-	V
Collector Cutoff Current V_{CE}=-50V, I_E=0	I_{CBO}	-	-	-10	nA
Collector Cutoff Current V_{CE}=-30V, V_{BE} =-0.5V	I_{CEX}	-	-	-50	nA

ELECTRICAL CHARACTERISTICS (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
ON CHARACTERISTICS(1)					
DC Current Gain					
V_{CE}=-10V, I_C=-0.1mA	h_{FE1}	75	-	-	-
V_{CE}=-10V, I_C=-1.0mA	h_{FE2}	100	-	-	
V_{CE}=-10V, I_C=-10mA	h_{FE3}	100	-	-	
V_{CE}=-10V, I_C=-150mA	h_{FE4}	100	-	300	
V_{CE}=-10V, I_C=-500mA	h_{FE5}	50	-	-	
Collector-Emitter Saturation Voltage					
I_C=-150mA, I_B=-15mA	$V_{CE(sat)1}$	-	-0.2	-0.4	V
I_C=-500mA, I_B=-50mA	$V_{CE(sat)2}$	-	-0.5	-1.6	V
Base-Emitter Saturation Voltage					
I_C=-150mA, I_B=-15mA	$V_{BE(sat)1}$	-	-	-1.3	V
I_C=-500mA, I_B=-50mA	$V_{BE(sat)2}$	-	-	-2.6	mV

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

DYNAMIC CHARACTERISTICS

Transition Frequency V_{CE}=-20V, I_C=-50mA, f=100MHz	f_T	200	-	-	MHz
Output Capacitance V_{CE}=-10V, f=1MHz	C_{ob}	-	-	8.0	pF

ELECTRICAL CHARACTERISTIC CURVES

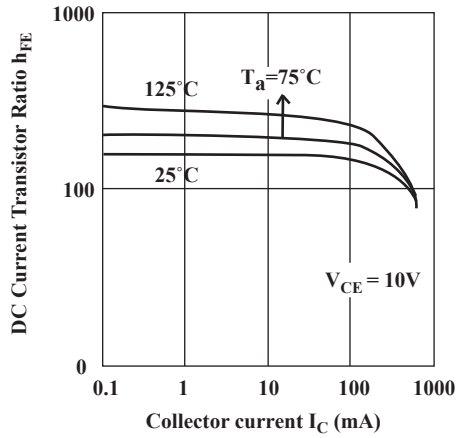


Fig.1 Current Gain & Collector Current

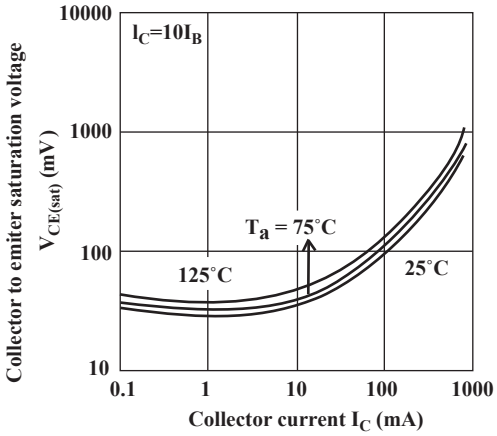


Fig.2 Satueation Voltage & Collector Current

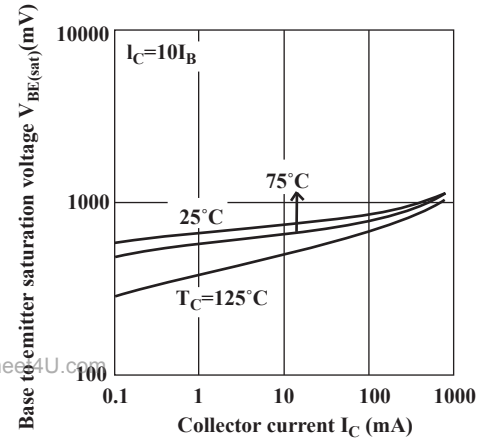


Fig.3 Satueation Voltage & Collector Current

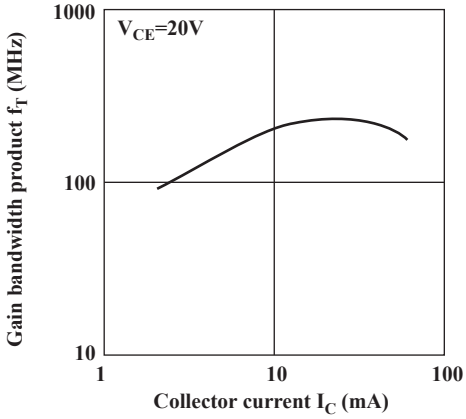


Fig.4 Gain Bandwidth Product & Collector Current

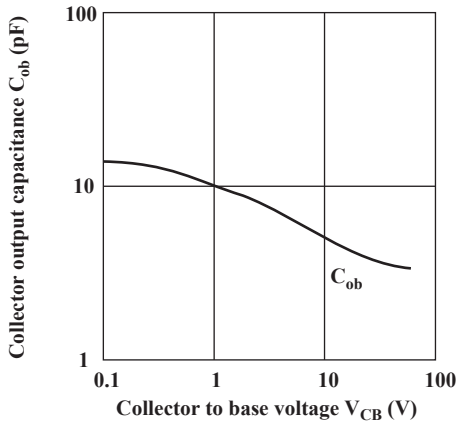


Fig.5 Capacitance & Collector to Base Voltage

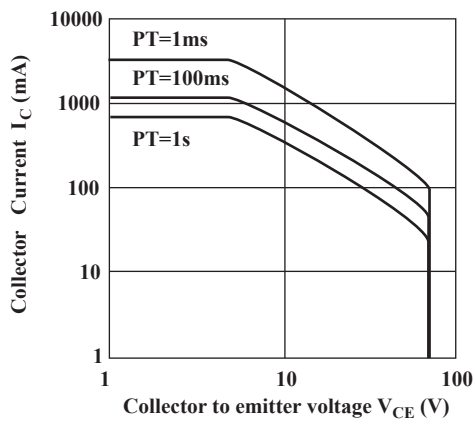
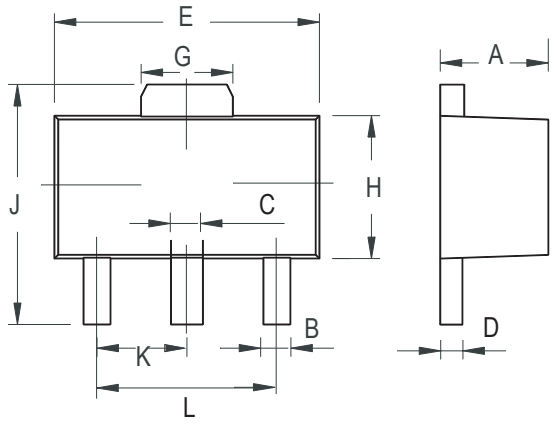


Fig.6 Safe Operating Area

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