

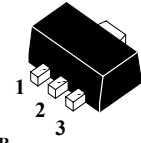
NPN Epitaxial Planar Transistors

(Pb) Lead(Pb)-Free

Features:

- * Low Collector Saturation Voltage
- * High Spwvd Switching
- * For Complementary Use With PNP Type WTM2907A

SOT-89



1. BASE
2. COLLECTOR
3. EMITTER

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Rating	Symbol	Limits	Unit
Collector-Base Voltage	V _{CBO}	75	V
Collector-Emitter Voltage	V _{CEO}	40	V
Emitter-Base Voltage	V _{EBO}	6.0	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

WTM2222A = 2222A, 1P

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

Parameter	Symbol	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage I _C =10μA	BV _{CBO}	75	-	-	V
Collector-Emitter Breakdown Voltage I _C =10mA	BV _{CEO}	40	-	-	V
Emitter-Base Breakdown Voltage I _E =10μA	BV _{EBO}	6.0	-	-	V
Collector Cutoff Current V _{CB} =60V	I _{CB0}	-	-	10	nA
Collector Cutoff Current V _{CB} =60V, V _{EB(off)} =3.0V	I _{CEX}	-	-	10	nA
Collector Cutoff Current V _{EB} =3.0V	I _{EBO}	-	-	50	nA

WTM2222A **WEITRON****ELECTRICAL CHARACTERISTICS (T_A=25°C Unless otherwise noted)**

Characteristic	Symbol	Min	Typ	Max	Unit
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ON CHARACTERISTICS⁽¹⁾

DC Current Gain V _{CE} =10V, I _C =100μA	h _{FE1}	35	-	-	
V _{CE} =10V, I _C =1.0mA	h _{FE2}	50	-	-	
V _{CE} =10V, I _C =10mA	h _{FE3}	75	-	-	
V _{CE} =10V, I _C =150mA	h _{FE4}	100	-	300	-
V _{CE} =10V, I _C =500mA	h _{FE5}	40	-	-	
V _{CE} =1.0V, I _C =150mA	h _{FE6}	50	-	-	
Collector-Emitter Saturation Voltage I _C =150mA, I _B =15mA	V _{CE(sat)1}	-	-	300	mV
I _C =500mA, I _B =50mA	V _{CE(sat)2}	-	-	1.0	V
Base-Emitter Saturation Voltage I _C =150mA, I _B =15mA	V _{BE(sat)1}	-	-	1.2	V
I _C =500mA, I _B =50mA	V _{BE(sat)2}	-	-	2.0	V

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

DYNAMIC CHARACTERISTICS

Transition Frequency V _{CE} =20V, I _C =20mA, f=100MHz	f _T	300	-	-	MHz
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WTM2222A



ELECTRICAL CHARACTERISTIC CURVES

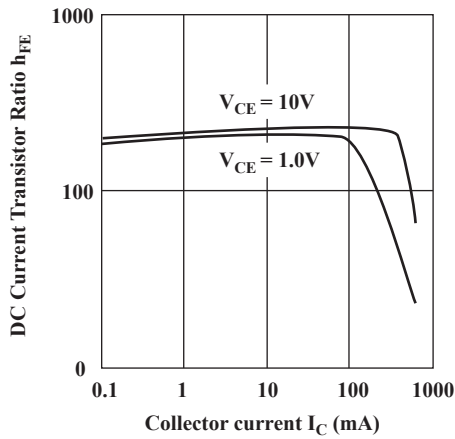


Fig.1 Current Gain & Collector Current

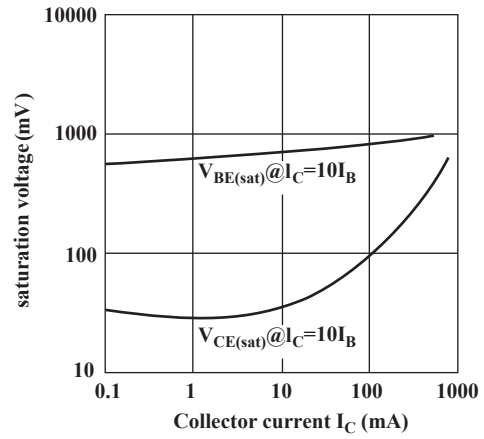


Fig.2 Saturation Voltage & Collector Current

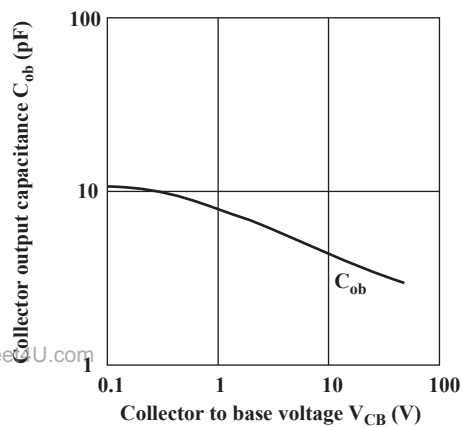


Fig.5 Capacitance & Collector to Base Voltage

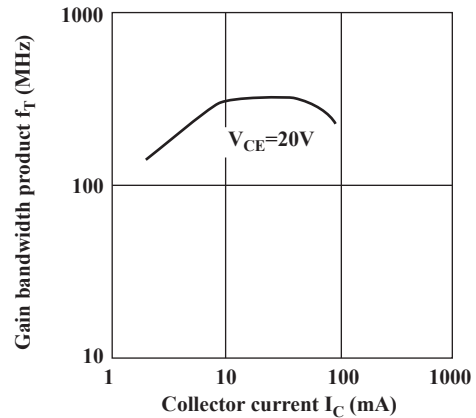


Fig.4 Gain Bandwidth Product & Collector Current

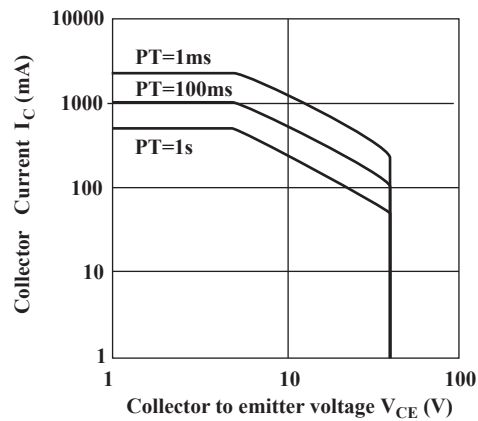
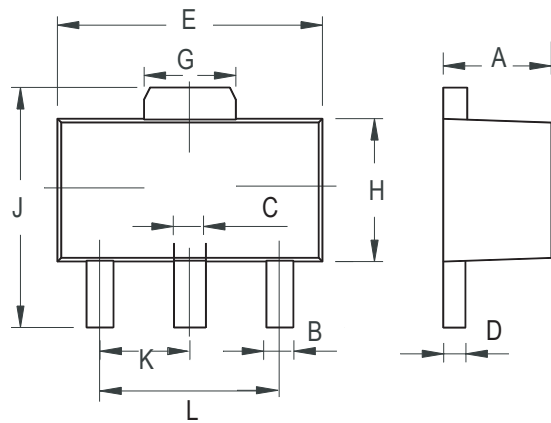


Fig.6 Safe Operating Area

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WTM2222A**WEITRON****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	1.500 TYP	
L	2.900	3.100