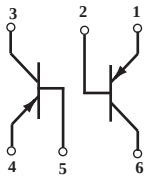
WEITRON

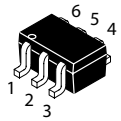
W4401DW

Epitaxial Planer Transistor
PNP Silicon

Pb Lead(Pb)-Free



PNP+PNP



SOT-363(SC-88)

Maximum Ratings

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	-50	Vdc
Collector-Base Voltage	V_{CBO}	-60	Vdc
Emitter-Base Voltage	V_{EBO}	-6.0	Vdc
Collector Current-Continuous	I_C	-150	mAdc

Thermal Characteristics

Characteristics	Symbol	Max	Unit
Total Device Dissipation (1) T_A=25°C	P_D	380	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	328	°C/W
Junction and Storage, Temperature	$T_{J,Tstg}$	-55 to +150	°C

Device Marking

W4401DW=5K

Electrical Characteristics (TA=25°C Unless Otherwise noted)

Characteristics	Symbol	Min	Max	Unit
Off Characteristics				
Collector-Emitter Breakdown Voltage(2) (I_C=-1.0mAdc.I_B=0)	V(BR)CEO	-50	-	Vdc
Collector-Base Breakdown Voltage (I_C=-50 uAdc, I_E=0)	V(BR)CBO	-60	-	Vdc
Emitter-Base Breakdown Voltage (I_E=-50 uAdc, I_C=0)	V(BR)EBO	-6.0	-	Vdc
Emitter Cutoff Current (V_{EB} =-6.0 Vdc)	I_{EBO}	-	-0.1	nAdc
Collector Cutoff Current (V_{CB}=-60Vdc)	I_{CBO}	-	-0.1	nAdc

1. Device Mounted FR4 glass epoxy printed circuit board using the minimun recommended footprint.
2. Pulse Test:Pulse Width≦300uS, Duty Cycle≦2.0%

Electrical Characteristics (T_A=25℃ unless otherwise noted) (Countinued)

Characteristics	Symbol	Min	Typ	Max	Unit

On Characteristics

DC Current Gain (I_C= -1 mAdc, V_{CE}= -6.0Vdc)	h_{FE}	120	-	560	-
Collector-Emitter Saturation Voltage (I_C= -50 mAdc, I_B= -5.0mAdc)	$V_{CE(sat)}$	-	-	-0.5	Vdc

Small-signal Characteristics

Current-Gain-Bandwidth Product (IE= 2.0 mAdc, V_{CE}= -12 Vdc, f=300MHz)	f_T	-	140	-	MHz
Output Capacitance (V_{CB}= -12 Vdc, f=1.0MHz)	Cobo	-	4.0	5.0	P_f

Electrical Characteristics Curve

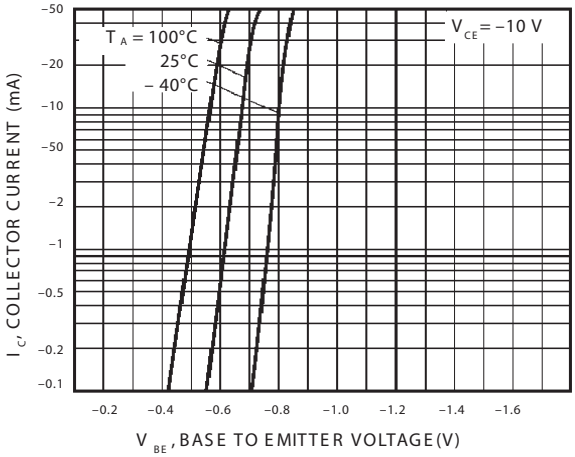


FIG.1 Grounded Emitter Propagation Characteristics

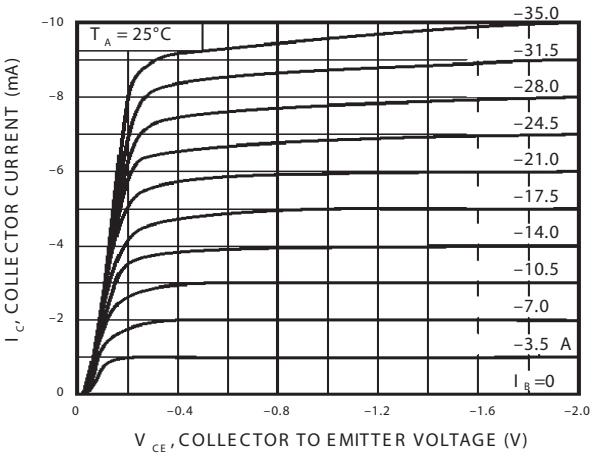


FIG.2 Grounded Emitter Output Characteristics(I)

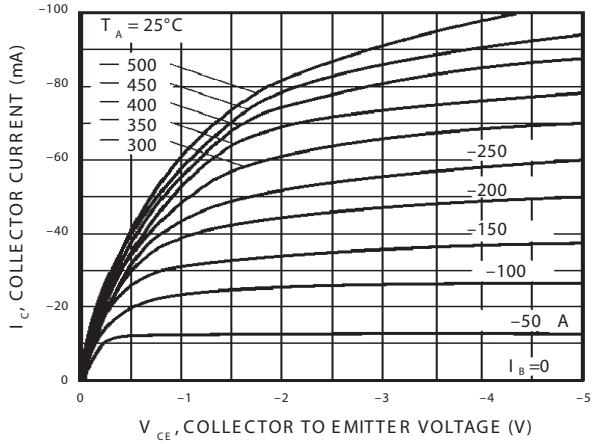


FIG.3 Grounded Emitter Output Characteristics(Ⅱ)

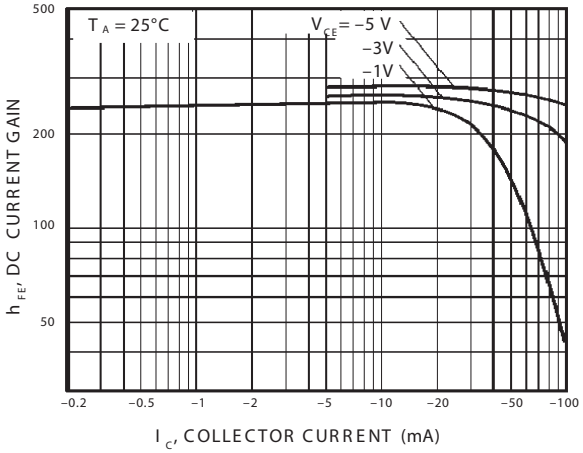


FIG.4 DC Current Gain vs. Collector Current (Ⅰ)

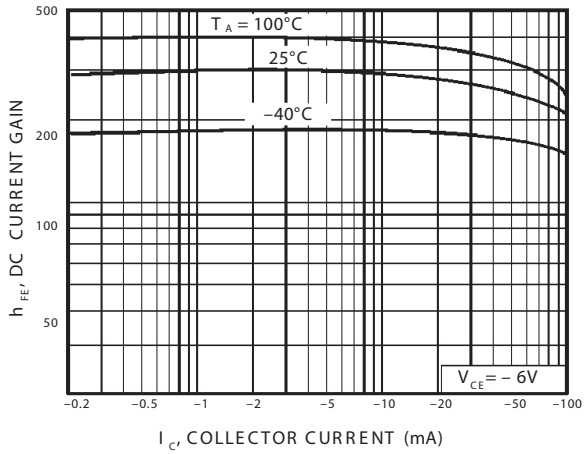


FIG.5 DC Current Gain vs. Collector Current (Ⅱ)

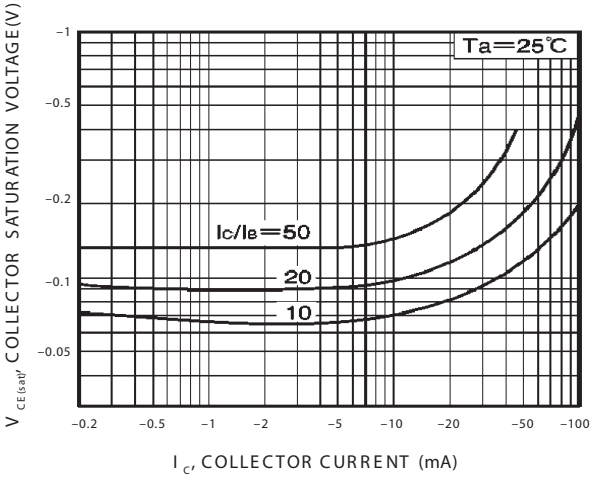


FIG.6 Collector-Emitter Saturation Voltage vs Collector Current (Ⅰ)

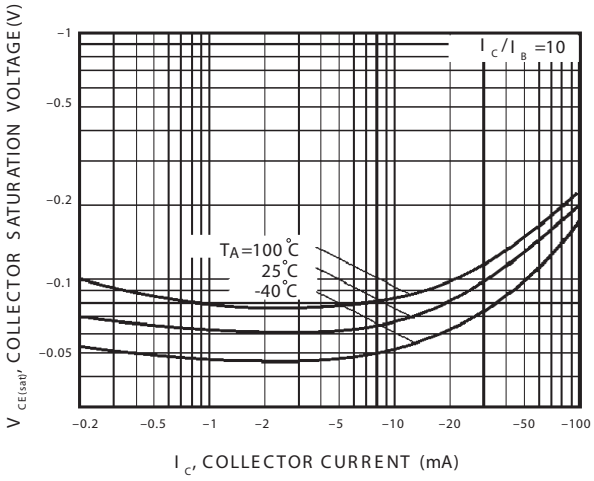


FIG.7 Collector-Emitter Saturation Voltage vs Collector Current (Ⅱ)

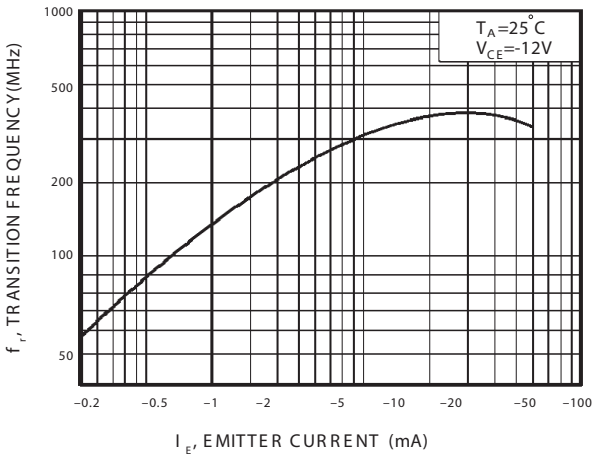


FIG.8 Gain Bandwidth Product vs Emitter Current

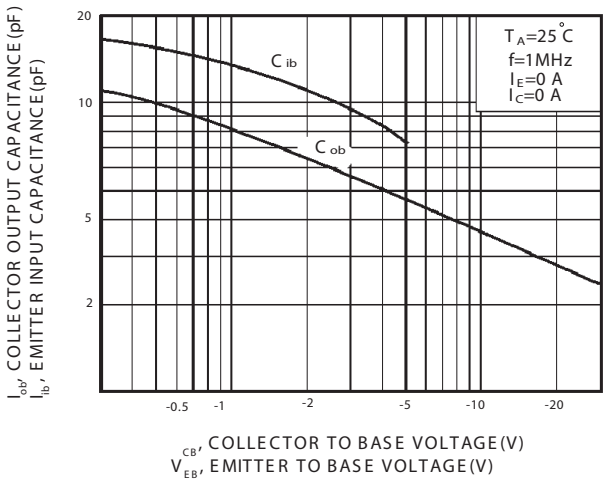
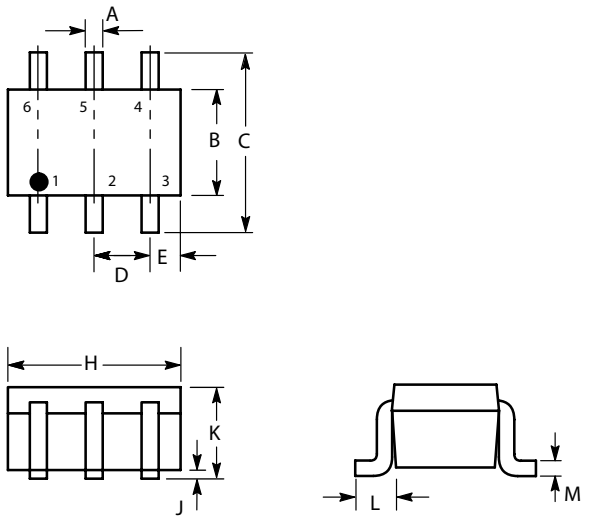


FIG. 9 Collector Output Capacitance vs Collector-Base Voltage
Emitter Input Capacitance vs Emitter-Base Voltage

SOT-363 Package Outline Dimensions

Unit:mm



SOT-363		
Dim	**Min**	**Max**
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 REF	
E	0.30	0.40
H	1.80	2.20
J	-	0.10
K	0.80	1.10
L	0.25	0.40
M	0.10	0.25