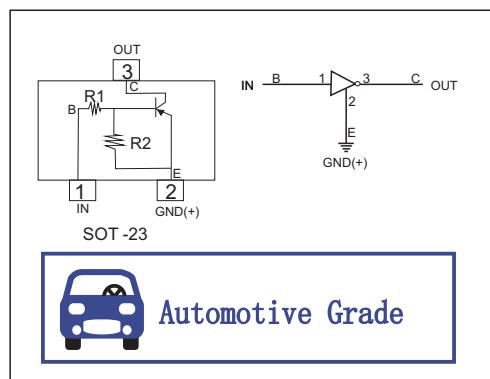




PNP PRE-BIASED SMALL SIGNAL

FEATURES

- Epitaxial Planar Die Construction
- Complementary NPN Types Available(DDTC)
- Built-In Biasing Resistors, R1≠ R2, R1(NOM)4.7KΩ, R2(NOM)47KΩ
- Lead, Halogen and Antimony Free, RoHS Compliant
- "Green" Device
- Qualified to AEC-Q101 Standards for High Reliability.



Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Supply Voltage,(3) to (2)	V _{CC}	-50	V
Input Voltage,(1) to (2)	V _{IN}	+5 to -30	V
Output Current	I _O	-100	mA
Power Dissipation	P _d	200	mW
Thermal Resistance,Junction to Ambient Air ⁽¹⁾	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55~150	°C

(1) Mounted on FR4 PC Board with recommended pad layout.

Electrical Characteristics @Ta=25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Input Voltage	V _{I(off)}	V _{CC} =5V, I _O =100uA	-0.5			V
Input Voltage	V _{I(on)}	V _O =-0.3V, I _O =-5mA			-1.3	uA
Output Voltage	V _{O(on)}	I _O /I _I =-5mA/-0.25mA		-0.1	-0.3	V
Input Current	I _I	V _I =-5V			-1.8	mA
Output Current	I _{O(off)}	V _{CC} =-50V, V _I =0V			-0.5	uA
DC Current Gain	G _I	V _O =-5V, I _O =-10mA	-80			
Input Resistor Tolerance	ΔR ₁		-30		+30	%
Resistance Ratio Tolerance	ΔR ₂ /R ₁		-20		+20	%
Gain-Bandwidth Product	f _T	V _{CE} =-10V, I _E =5mA, f=100MHz		250		



Fig.1 Power Derating Curve

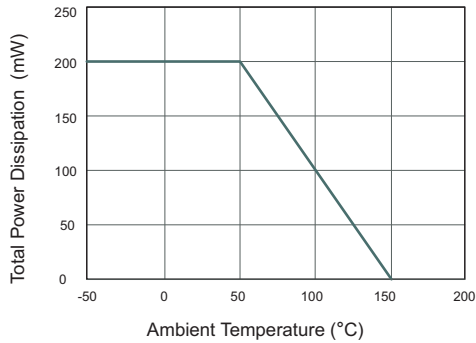


Fig.2 $V_{CE(SAT)}$ VS. I_c

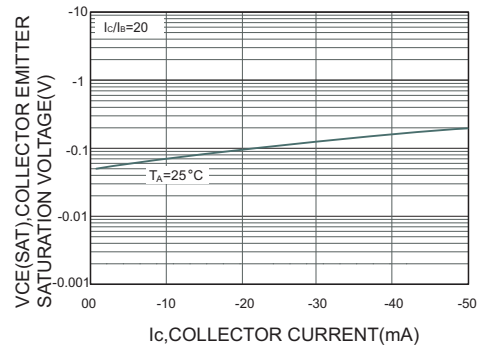


Fig.3 DC Current Gain

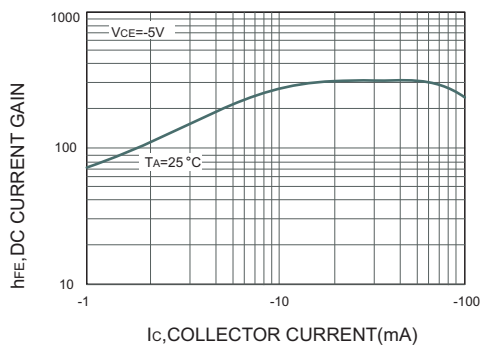
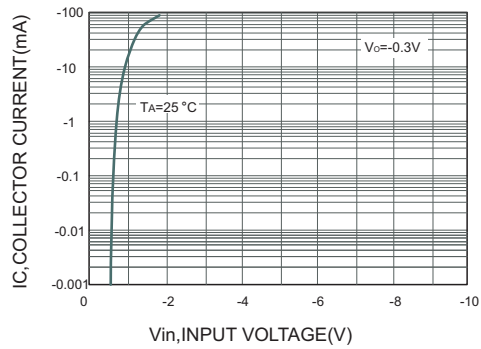
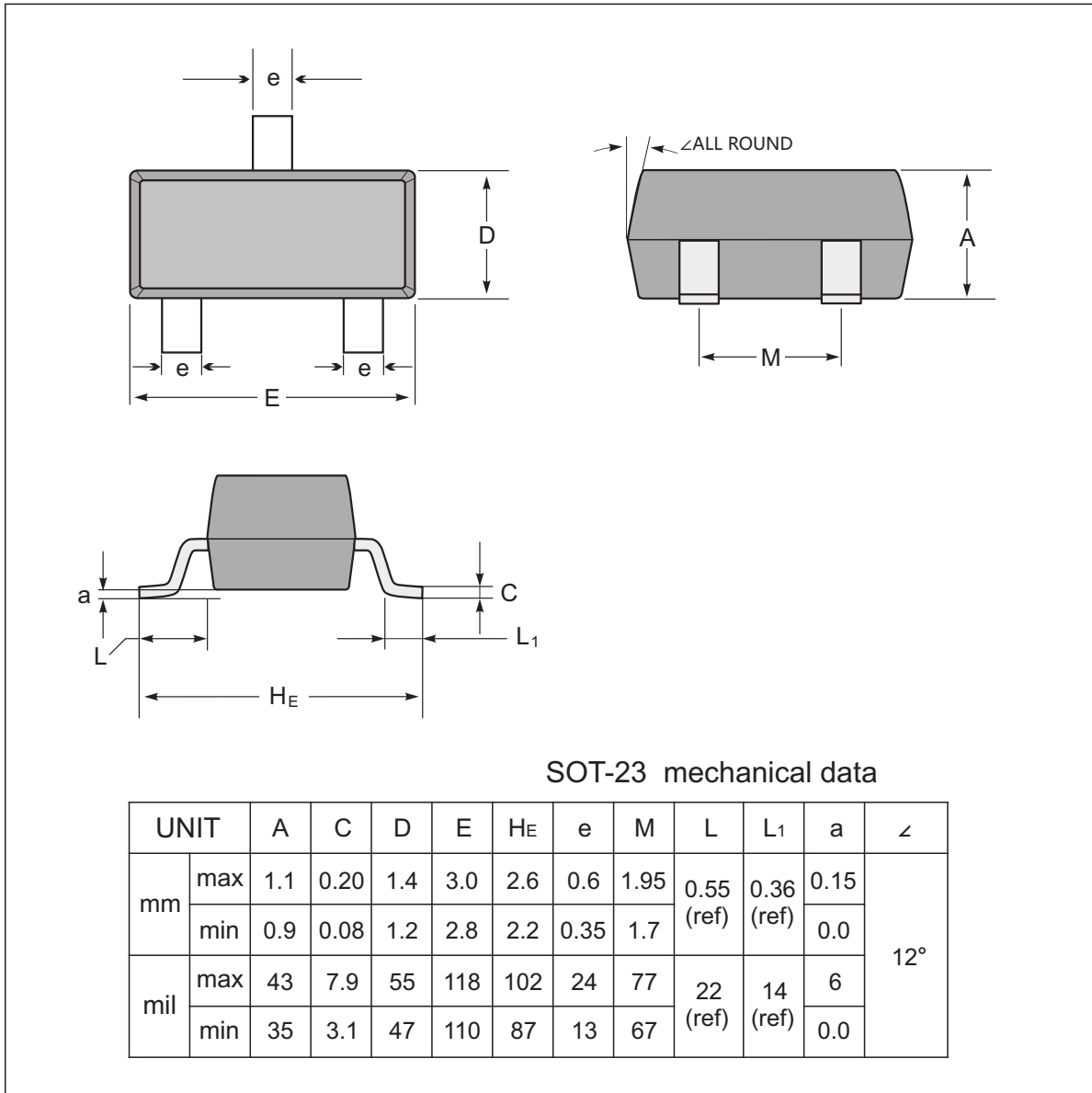


Fig.4 Collector Current VS. Input Voltage

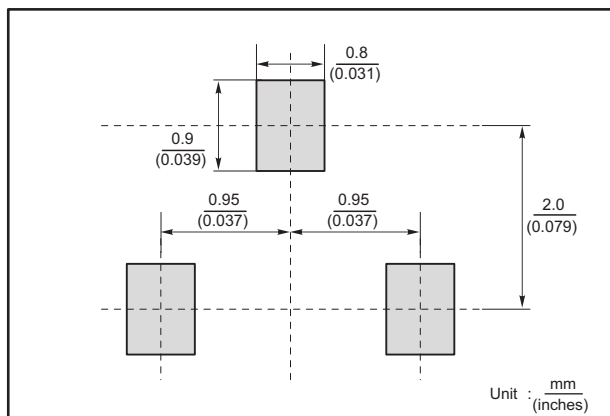




SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
AT-DDTA143ZCA	P11