DESCRIPTION

The D882 is available in SOT-89 Package

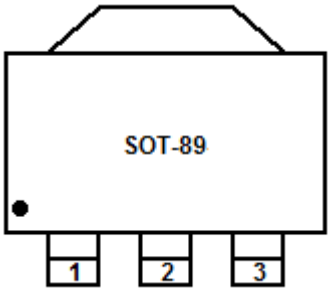
FEATURES

- Power dissipation
- Available in SOT-89 Package

ORDERING INFORMATION

Package Type	Part Number
SOT-89	D882
Note	SPQ: 1,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



1. BASE
2. COLLECTOR
3. EMITTER

ABSOLUTE MAXIMUM RATINGS

T_A=25°C, unless otherwise noted

V_{CBO}, Collector-Base Voltage	40V
V_{CEO}, Collector-Emitter Voltage	30V
V_{EBO}, Emitter-Base Voltage	6V
I_C, Collector Current-Continuous	1.5A
P_C, Collector Power Dissipation	1.2W
T_J, Junction Temperature	150°C
T_{STG}, Storage Temperature	-55°C ~150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_{amb}=25°C, unless otherwise noted

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0		40			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0		30			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0		6			V
Collector Cut-off Current	I_{CBO}	V_{CB}=40V, I_E=0				1	uA
Collector Cut-off Current	I_{CEO}	V_{CE}=30V, I_B=0				10	uA
Emitter Cut-off Current	I_{EBO}	V_{EB}=6V,I_C=0				1	uA
DC Current Gain	$h_{FE(1)}$	V_{CE}=2V, I_C=1A	R	60		120	
			O	100		200	
			Y	160		320	
			GR	200		400	
	$h_{FE(2)}$	V_{CE}=2V, I_C=100mA		32			
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2A, I_B=0.2A				0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=2A, I_B=0.2A				1.5	V
Transition Frequency	f_T	V_{CE}=5V, I_C=0.1A, f=10MHz		50			MHz

TYPICAL CHARACTERISTICS

Figure 1. Static Characteristic

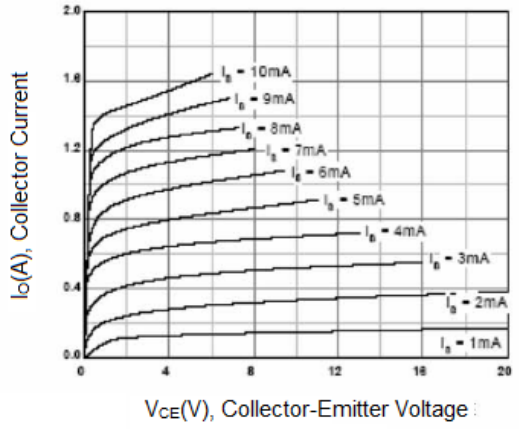


Figure 2. DC Current Gain

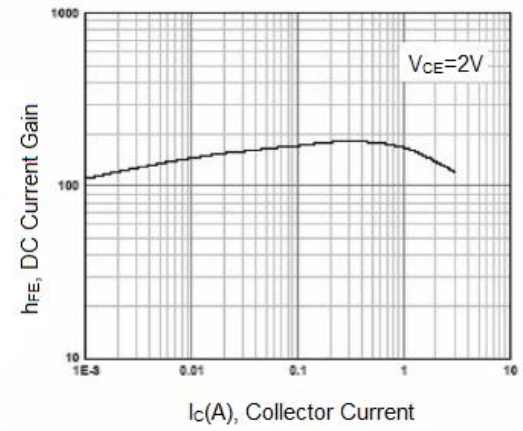


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

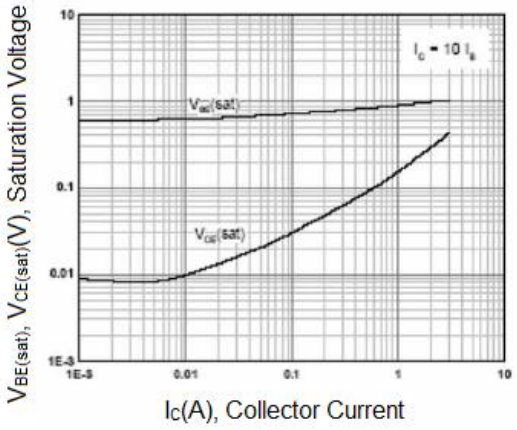


Figure 4. Current Gain Bandwidth Product

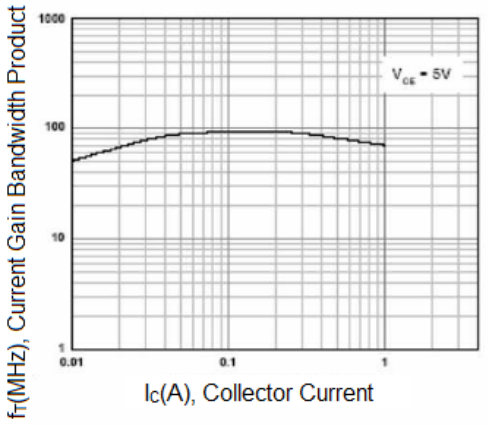
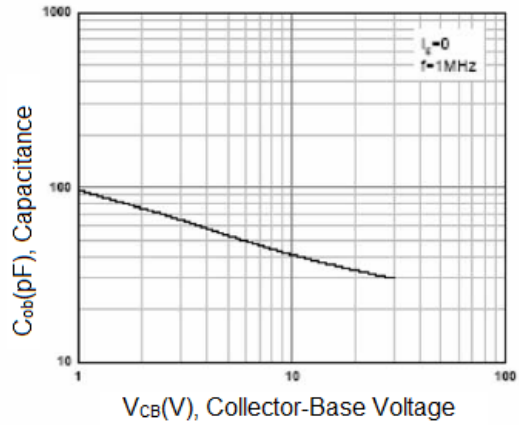
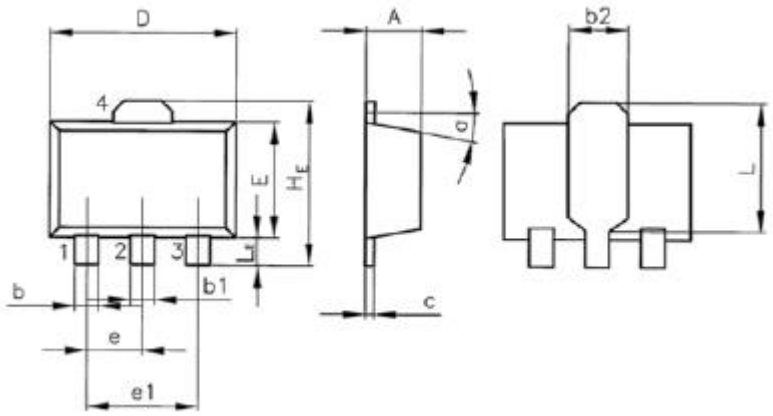


Figure 5. Collector Output Capacitance



PACKAGE INFORMATION

Dimension in SOT-89 (Unit: mm)



Symbol	Min	Typ	Max
A	-	1.500	-
b	-	-	0.650
b1	-	-	0.650
b2		1.600	-
c	0.250	-	-
D	-	4.500	-
E	-	-	2.600
e	-	1.500	-
e1	-	3.000	-
H_E	-	-	4.250
L	2.600	-	2.950
L_E	0.800	-	1.200
α	-	-	10°

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