



NPN Silicon Epitaxial Planar Transistor

D882

FEATURES

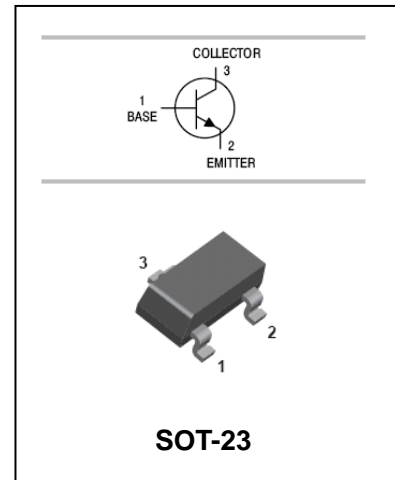
- Low saturation voltage.
- Excellent and high H_{FE} Linearity.
- High collector dissipation. ($P_c=350mW$).



Lead-free

APPLICATIONS

- AUDIO frequency general purpose amplifier application.



ORDERING INFORMATION

Type No.	Marking	Package Code
D882	D882	SOT-23

MAXIMUM RATING @ $T_a=25^{\circ}C$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Dissipation	350	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	$^{\circ}C$



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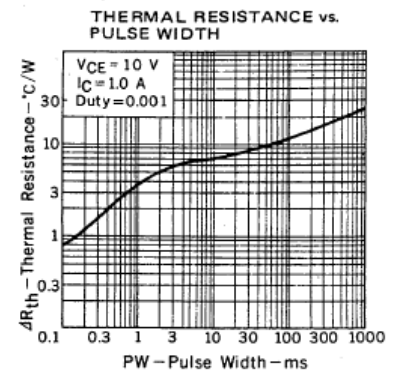
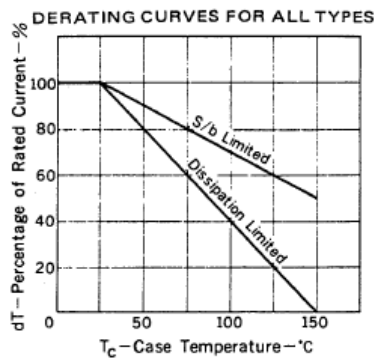
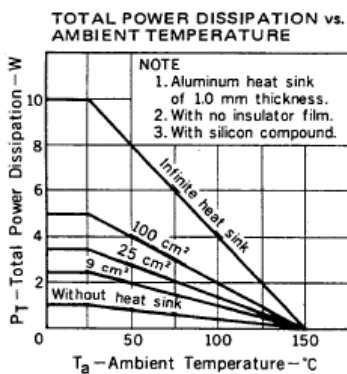
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}=2V, I_C=1A$	60	160	400	
		$V_{CE}=2V, I_C=20mA$	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2A, I_B=0.2A$		0.3	0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=2A, I_B=0.2A$		1.0	2	V
Transition frequency	f_T	$V_{CE}=5V, I_C=0.1A$		90		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	P	E
Range	60-120	100-200	160-320	200-400

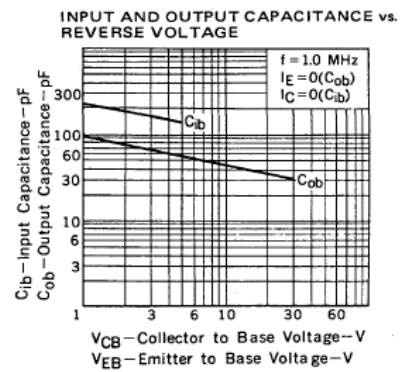
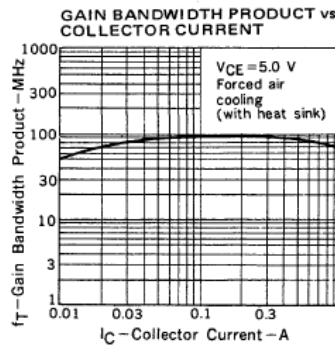
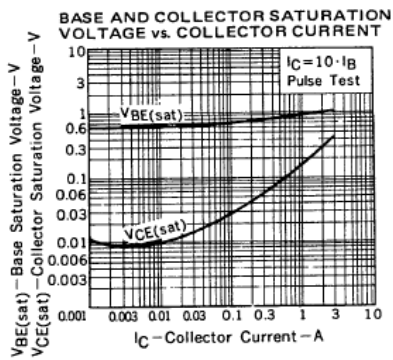
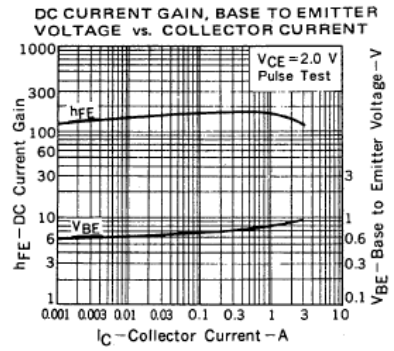
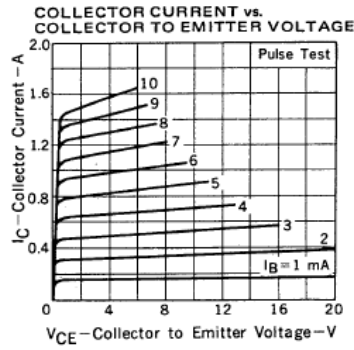
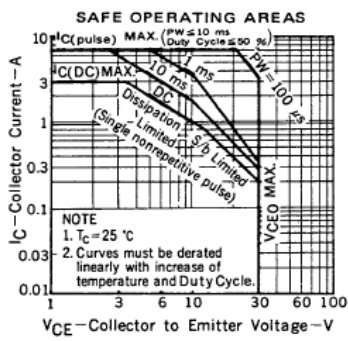
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





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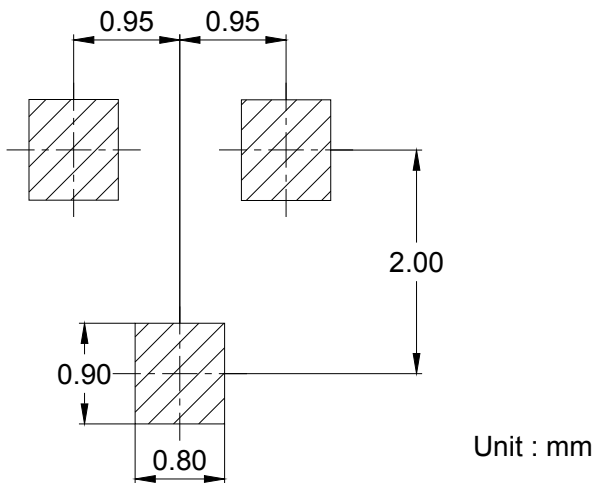
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23

SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
D882	SOT-23	3000/Tape&Reel