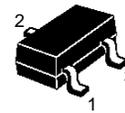


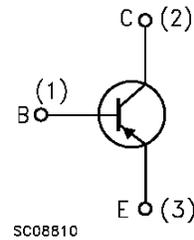
SMALL SIGNAL PNP TRANSISTOR

Type	Marking
SOA56	2GT

- SILICON EPITAXIAL PLANAR PNP TRANSISTORS
- MINIATURE PLASTIC PACKAGE FOR APPLICATION IN SURFACE MOUNTING CIRCUITS
- MEDIUM CURRENT AF AMPLIFICATION
- NPN COMPLEMENTS IS SOA06


SOT-23

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage ($I_E = 0$)	-80	V
V_{CEO}	Collector-Emitter Voltage ($I_B = 0$)	-80	V
V_{EBO}	Emitter-Base Voltage ($I_C = 0$)	-4	V
I_C	Collector Current	-0.5	A
P_{tot}	Total Dissipation at $T_c = 25^\circ\text{C}$	350	mW
T_{stg}	Storage Temperature	-65 to 150	$^\circ\text{C}$
T_j	Max. Operating Junction Temperature	150	$^\circ\text{C}$

SOA56

THERMAL DATA

$R_{thj-amb}$ •	Thermal Resistance Junction-Ambient	Max	350	°C/W
-----------------	-------------------------------------	-----	-----	------

• Mounted on a ceramic substrate area = 15 x 15 x 0.5 mm

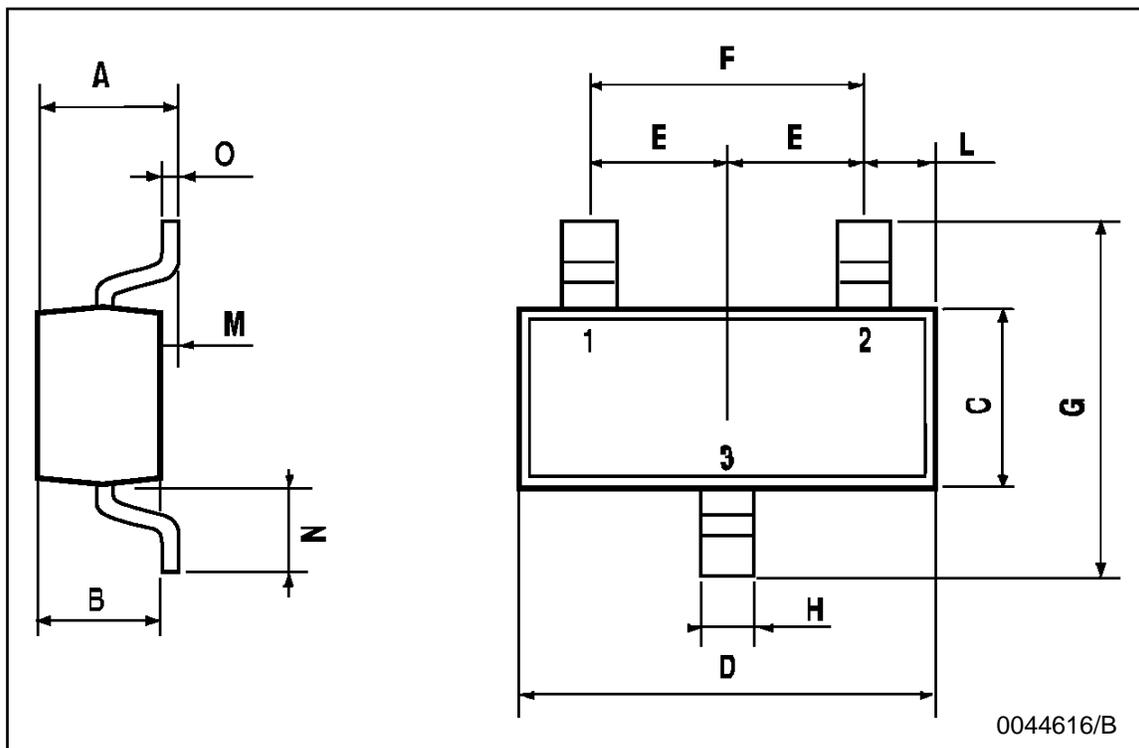
ELECTRICAL CHARACTERISTICS ($T_{case} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current ($I_E = 0$)	$V_{CB} = -80\text{ V}$			-100	nA
I_{CEO}	Collector Cut-off Current ($I_E = 0$)	$V_{CE} = -60\text{ V}$			-100	nA
$V_{(BR)CEO}$ *	Collector-Emitter Breakdown Voltage ($I_B = 0$)	$I_C = -1\text{ mA}$	-80			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_C = 0$)	$I_E = -100\text{ }\mu\text{A}$	-4			V
$V_{CE(sat)}$ *	Collector-Emitter Saturation Voltage	$I_C = -100\text{ mA}$ $I_B = -10\text{ mA}$			-0.25	V
$V_{BE(on)}$ *	Base-Emitter On Voltage	$I_C = -100\text{ mA}$ $V_{CE} = -1\text{ V}$			-1.2	V
h_{FE} *	DC Current Gain	$I_C = -10\text{ mA}$ $V_{CE} = -1\text{ V}$ $I_C = -100\text{ mA}$ $V_{CE} = -1\text{ V}$	50 50			
f_T	Transition Frequency	$I_C = -10\text{ mA}$ $V_{CE} = -2\text{ V}$ $f = 100\text{ MHz}$	50			MHz

* Pulsed: Pulse duration = 300 μs , duty cycle $\leq 2\%$

SOT-23 MECHANICAL DATA

DIM.	mm			mils		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	0.85		1.1	33.4		43.3
B	0.65		0.95	25.6		37.4
C	1.20		1.4	47.2		55.1
D	2.80		3	110.2		118
E	0.95		1.05	37.4		41.3
F	1.9		2.05	74.8		80.7
G	2.1		2.5	82.6		98.4
H	0.38		0.48	14.9		18.8
L	0.3		0.6	11.8		23.6
M	0		0.1	0		3.9
N	0.3		0.65	11.8		25.6
O	0.09		0.17	3.5		6.7



Information furnished is believed to be accurate and reliable. However, SGS-THOMSON Microelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of SGS-THOMSON Microelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. SGS-THOMSON Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of SGS-THOMSON Microelectronics.

© 1995 SGS-THOMSON Microelectronics - Printed in Italy - All Rights Reserved

SGS-THOMSON Microelectronics GROUP OF COMPANIES

Australia - Brazil - Canada - China - France - Germany - Hong Kong - Italy - Japan - Korea - Malaysia - Malta - Morocco - The Netherlands - Singapore - Spain - Sweden - Switzerland - Taiwan - Thailand - United Kingdom - U.S.A