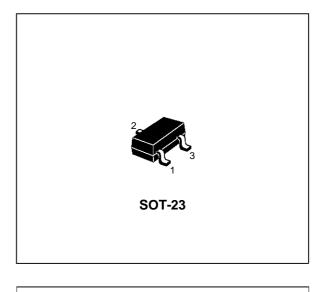


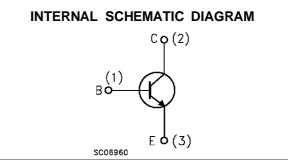
SOA06

SMALL SIGNAL NPN TRANSISTOR

Туре	Marking	
SOA06	1GT	

- SILICON EPITAXIAL PLANAR NPN TRANSISTORS
- MINIATURE PLASTIC PACKAGE FOR APPLICATION IN SURFACE MOUNTING CIRCUITS
- MEDIUM CURRENT AF AMPLIFICATION
- PNP COMPLEMENTS IS SOA56





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	
lc	Collector Current	0.5	A	
Ptot	Total Dissipation at $T_c = 25 \ ^{\circ}C$	350	mW	
T _{stg}	Storage Temperature	-65 to 150	°C	
Tj	Max. Operating Junction Temperature	150	°C	

March 1996

THERMAL DATA

R _{thj-amb} •	Thermal Resistance Junction-Ambient	Max	350	°C/W
 Mounted on a 	a ceramic substrate area = 15 x 15 x 0.5 mm			

ELECTRICAL CHARACTERISTICS (T_{case} = 25 °C unless otherwise specified)

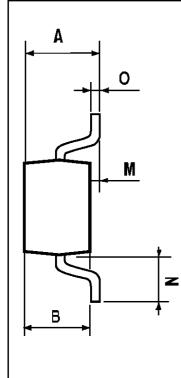
Symbol	Parameter	Test Conditions	Min.	Тур.	Max.	Unit
Ісво	Collector Cut-off Current ($I_E = 0$)	V _{CB} = 80 V			100	nA
I _{CEO}	Collector Cut-off Current ($I_E = 0$)	V _{CE} = 60 V			100	nA
V _{(BR)CEO} *	Collector-Emitter Breakdown Voltage (I _B = 0)	I _C = 1 mA	80			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage (I _C = 0)	I _E = 100 μA	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		50 50			
f _T	Transition Frequency	$I_C = 10 \text{ mA}$ $V_{CE} = 2 \text{ V}$ f = 100 MHz	100			MHz

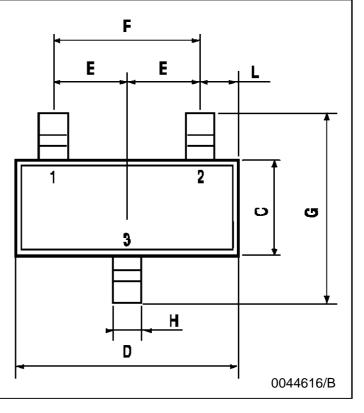
* Pulsed: Pulse duration = 300 μ s, duty cycle \leq 2 %



DIM.	mm			mils			
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
А	0.85		1.1	33.4		43.3	
В	0.65		0.95	25.6		37.4	
С	1.20		1.4	47.2		55.1	
D	2.80		3	110.2		118	
Е	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	
н	0.38		0.48	14.9		18.8	
L	0.3		0.6	11.8		23.6	
М	0		0.1	0		3.9	
Ν	0.3		0.65	11.8		25.6	
0	0.09		0.17	3.5		6.7	

SOT-23 MECHANICAL DATA





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