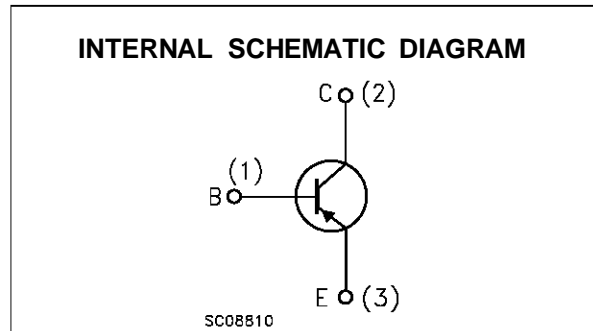


SMALL SIGNAL PNP TRANSISTOR

Type	Marking
SO692	P39

- SILICON EPITAXIAL PLANAR PNP TRANSISTORS
- MINIATURE PLASTIC PACKAGE FOR APPLICATION IN SURFACE MOUNTING CIRCUITS
- HIGH VOLTAGE TRANSISTOR FOR VIDEO AMPLIFIER
- NPN COMPLEMENT IS SO642



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage (I _E = 0)	-300	V
V _{CEO}	Collector-Emitter Voltage (I _B = 0)	-300	V
V _{EBO}	Emitter-Base Voltage (I _C = 0)	-5	V
I _C	Collector Current	-0.1	A
I _{CM}	Collector Peak Current	-0.3	A
P _{tot}	Total Dissipation at T _c = 25 °C	310	mW
T _{stg}	Storage Temperature	-65 to 150	°C
T _j	Max. Operating Junction Temperature	150	°C

THERMAL DATA

$R_{thj-amb}$ •	Thermal Resistance Junction-Ambient	Max	450	$^{\circ}C/W$
R_{thj-SR} •	Thermal Resistance Junction-Substrate	Max	320	$^{\circ}C/W$

• Mounted on a ceramic substrate area = 15 x 15 x 0.7 mm

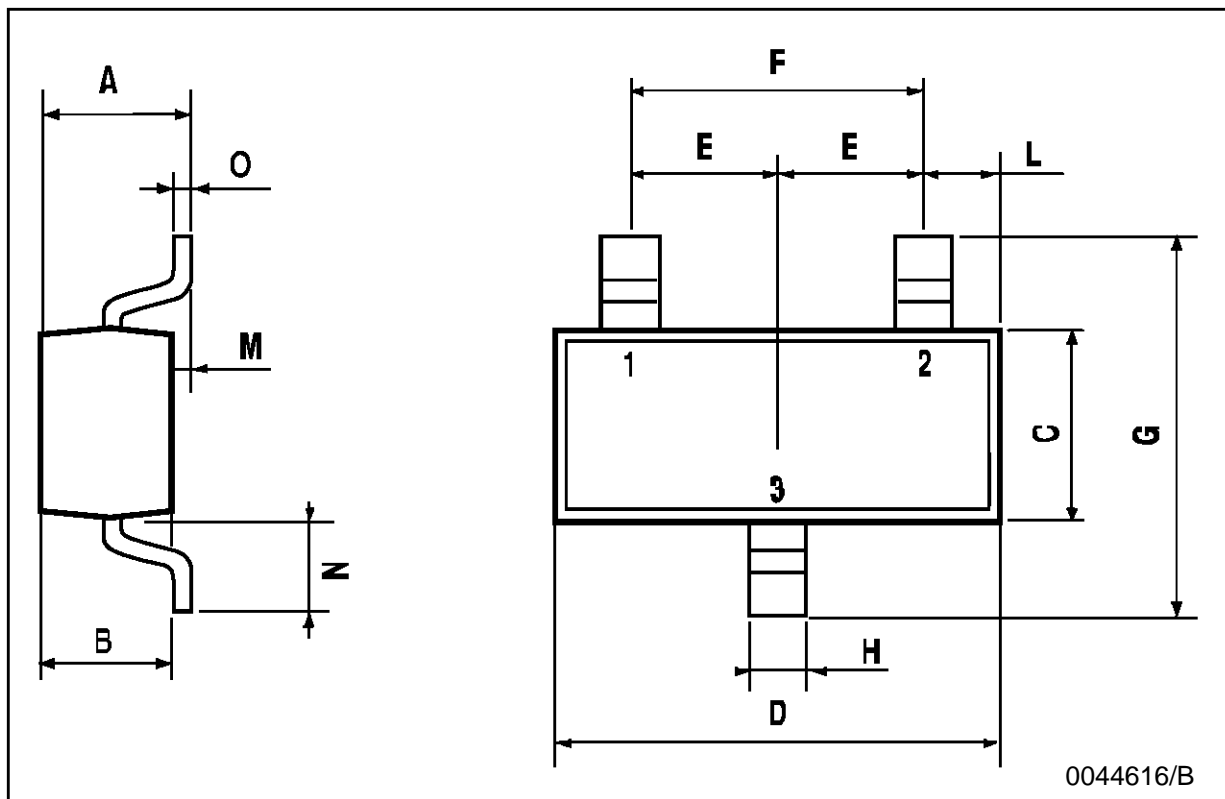
ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current ($I_E = 0$)	$V_{CB} = -200 V$			-100	nA
$V_{(BR)CBO}^*$	Collector-Emitter Breakdown Voltage ($I_E = 0$)	$I_C = -100 \mu A$	-300			V
$V_{(BR)CEO}^*$	Collector-Emitter Breakdown Voltage ($I_B = 0$)	$I_C = -1 mA$	-300			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_C = 0$)	$I_E = -100 \mu A$	-5			V
$V_{CE(sat)}^*$	Collector-Emitter Saturation Voltage	$I_C = -20 mA$ $I_B = -2 mA$			-0.5	V
$V_{BE(sat)}^*$	Base-Emitter Saturation Voltage	$I_C = -20 mA$ $I_B = -2 mA$			-0.9	V
h_{FE}^*	DC Current Gain	$I_C = -1 mA$ $V_{CE} = -10 V$ $I_C = -10 mA$ $V_{CE} = -10 V$ $I_C = -30 mA$ $V_{CE} = -10 V$	25 40 25			
f_T	Transition Frequency	$I_C = -10 mA$ $V_{CE} = -20 V$ $f = 50 MHz$	50			MHz
C_{CB}	Collector Base Capacitance	$V_{CB} = -20 V$ $f = 1 MHz$			6	pF

* 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



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