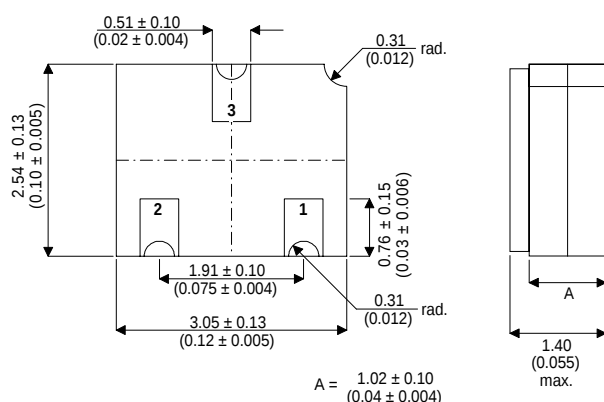


HIGH SPEED, MEDIUM POWER, PNP SWITCHING TRANSISTOR IN A HERMETICALLY SEALED CERAMIC SURFACE MOUNT PACKAGE FOR HIGH RELIABILITY APPLICATIONS

MECHANICAL DATA

Dimensions in mm (inches)



SOT23 CERAMIC (LCC1 PACKAGE)

Underside View

PAD 1 – Base PAD 2 – Emitter PAD 3 – Collector

FEATURES

- SILICON PLANAR EPITAXIAL PNP TRANSISTOR
- HERMETIC CERAMIC SURFACE MOUNT PACKAGE (SOT23 COMPATIBLE)
- CECC SCREENING OPTIONS
- SPACE QUALITY LEVELS OPTIONS
- HIGH SPEED SATURATED SWITCHING

APPLICATIONS:

Hermetically sealed surface mount version of the popular 2N2907A for high reliability / space applications requiring small size and low weight devices.

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V _{CBO}	Collector - Base Voltage	–60V
V _{CEO}	Collector - Emitter Voltage	–60V
V _{EBO}	Emitter - Base Voltage	–5V
I _C	Collector Current	600mA
P _D	Total Device Dissipation	350mW
P _D	Derate above 50°C	2.0mW / °C
R _{ja}	Thermal Resistance Junction to Ambient	350°C / W
T _{stg} , T _j	Storage Temperature, Operating Temp Range	–55 to 200°C

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V _{CEO(sus)} * Collector – Emitter Sustaining Voltage	I _C = 10mA	–60			V
V _{(BR)CBO} * Collector – Base Breakdown Voltage	I _C = 10μA	–60			V
V _{(BR)EBO} * Emitter – Base Breakdown Voltage	I _E = 10μA I _C = 0	–5			V
I _{CEX} * Collector Cut-off Current	V _{CE} = 30V V _{BE} = 0.5V			50	nA
I _{CBO} * Collector – Base Cut-off Current	I _E = 0 V _{CB} = 50V			0.01	μA
	T _C = 125°C			10	
I _{BEO} Base Cut-off Current	V _{CE} = 30V V _{BE} = 0.5V			50	nA
V _{CE(sat)} * Collector – Emitter Saturation Voltage	I _C = 150mA I _B = 15mA			–0.4	V
	I _C = 500mA I _B = 50mA			–1.6	
V _{BE(sat)} * Base – Emitter Saturation Voltage	I _C = 150mA I _B = 15mA			–1.3	V
	I _C = 500mA I _B = 50mA			–2.6	
h _{FE} * DC Current Gain	I _C = 0.1mA V _{CE} = 10V	75			—
	I _C = 1mA V _{CE} = 10V	100			
	I _C = 10mA V _{CE} = 10V	100			
	I _C = 150mA V _{CE} = 10V	100		300	
	I _C = 500mA V _{CE} = 10V	50			

* Pulse test t_p = 300μs , δ ≤ 2%

DYNAMIC CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
f _T Transition Frequency	I _C = 50mA V _{CE} = 20V f = 100MHz	200			MHz
C _{ob} Output Capacitance	V _{CB} = 10V I _E = 0 f = 1.0MHz			8	pF
C _{ib} Input Capacitance	V _{BE} = 2V I _C = 0 f = 1.0MHz			30	pF

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
t _{on} Turn-on Time	V _{CC} = 30V		26	45	ns
t _d Delay Time	I _C = 150mA		6.0	10	
t _r Rise Time	I _{B1} = 15mA		20	40	
t _{off} Turn-off Time	V _{CC} = 6V		70	100	ns
t _s Storage Time	I _C = 150mA		50	80	
t _f Fall Time	I _{B1} = I _{B2} = 15mA		20	30	

Part number search for devices
beginning "2N2907ACSM"

[Semelab Home](#)

Datasheets are downloaded
as Acrobat PDF files.



Bipolar Products

PRODUCT	Polarity	Package	V _{CEO}	I _C (cont)	H _{FE} (min)	H _{FE} (max)	@ V _{CE} /I _C	F _T	P _D
2N2907ACSM	PNP	LCC1	60V	0.6A	100	300	10/0.15	200MHz	0.4W
2N2907ACSM4	PNP	LCC3	60V	0.6A	100	300	10/0.15	200MHz	0.4W
2N2907ACSM4-JQR-B	PNP	LCC3	60V	0.6A	100	300	10/0.15	200MHz	0.4W
2N2907ACSMCECC	PNP	LCC1	60V	0.6A	100	300	10/0.15	200MHz	0.4W
2N2907ACSM-JQR-B	PNP	LCC1	60V	0.6A	100	300	10/0.15	200MHz	0.4W

Searched through 3084 records and found 5 products matching your criteria.

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If you are unable to find a suitable part, please [contact us](#).

