

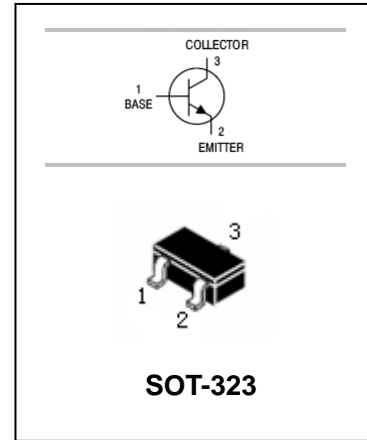


Silicon Epitaxial Planar Transistor

2SC4097

FEATURES

- Excellent h_{FE} linearity.
- Power dissipation: $P_{CM}=200mW$



APPLICATIONS

- NPN Silicon Epitaxial Planar Transistor.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4097	CP/CQ/CR	SOT-323

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	32	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	500	mA
I_{CM}	Peak Collector Current	500	mA
I_{BM}	Peak Base Current	10	mA
P_C	Collector Dissipation	250	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	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=20V, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}=3V, I_C=100mA$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_{CE}=500mA, I_B=50mA$			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_{CE}=500mA, I_B=50mA$			1.1	V
Transition frequency	f_T	$V_{CE}=5V, I_C=20mA, f=100MHz$		250		MHz
Collector output capacitance	C_{ob}	$V_{CB}=12V, I_E=0, f=1MHz$			6	pF

CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	CP	CQ	CR

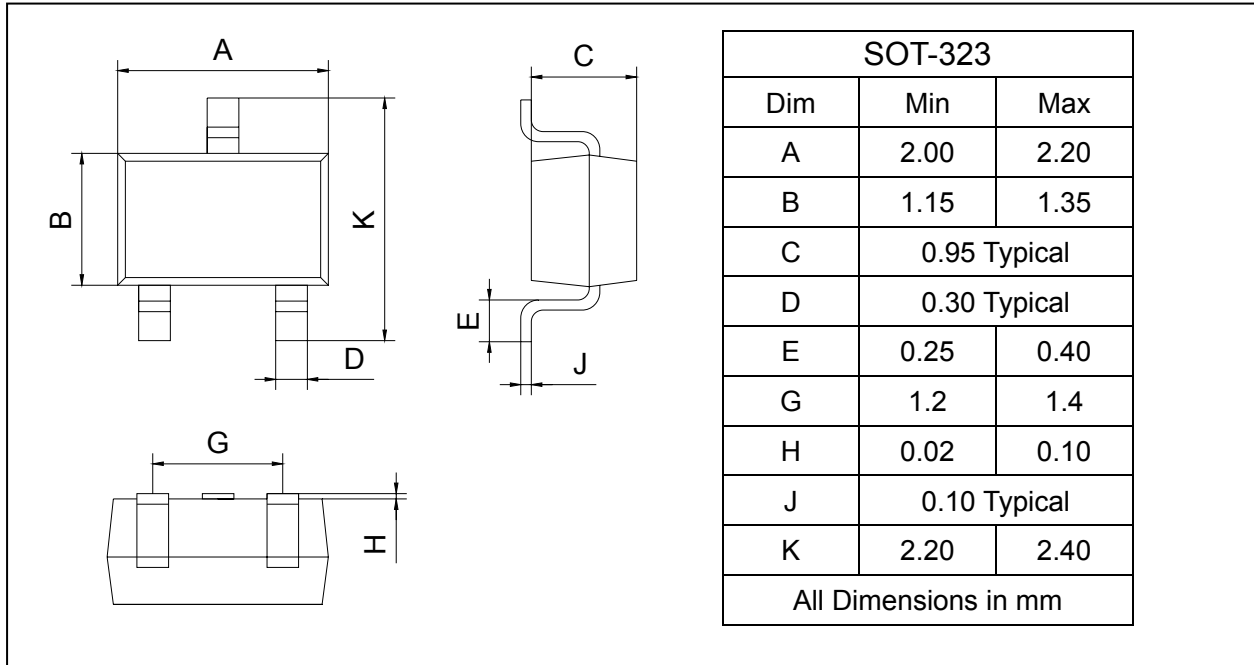
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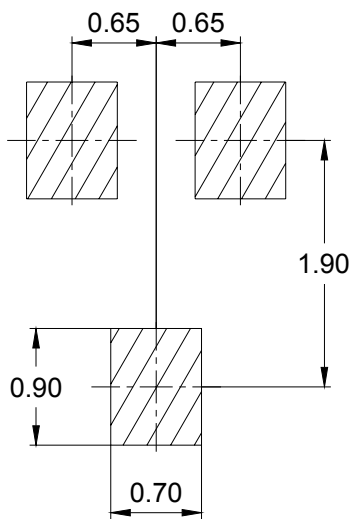
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SC4097	SOT-323	3000/Tape&Reel