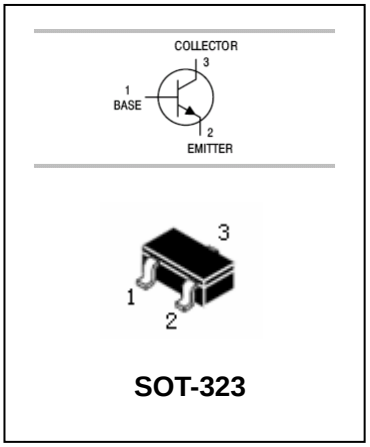
Silicon Epitaxial Planar Transistor **2SC4097W**

FEATURES

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

Lead-free



SOT-323

APPLICATIONS

- NPN Silicon Epitaxial Planar Transistor.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4097W	CP/CQ/CR	SOT-323

MAXIMUM RATING @ Ta=25℃ 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
P_C	Collector Dissipation	200	mW
T_j,T_{stg}	Junction and Storage Temperature	-55~150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Silicon Epitaxial Planar Transistor **2SC4097W**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,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=100μA,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=10mA	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_{CE}=100mA,I_B=10mA			0.4	V
Transition frequency	f_T	V_{CE}=5V, I_C= 20mA,f=100MHz		250		GHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			6	pF

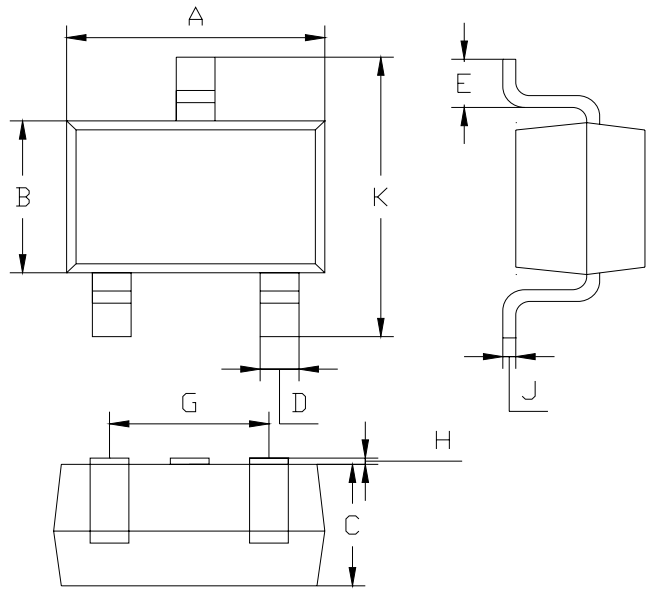
CLASSIFICATION OF h_{FE}

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

Silicon Epitaxial Planar Transistor **2SC4097W**

PACKAGE OUTLINE

Plastic surface mounted package SOT-323



SOT-323		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.15	0.35
E	0.25	0.40
G	1.2	1.4
H	0.02	0.1
J	0.1Typical	
K	2.1	2.3
All Dimensions in mm		

PACKAGE INFORMATION

Device	Package	Shipping
2SC4097W	SOT-323	3000/Tape&Reel