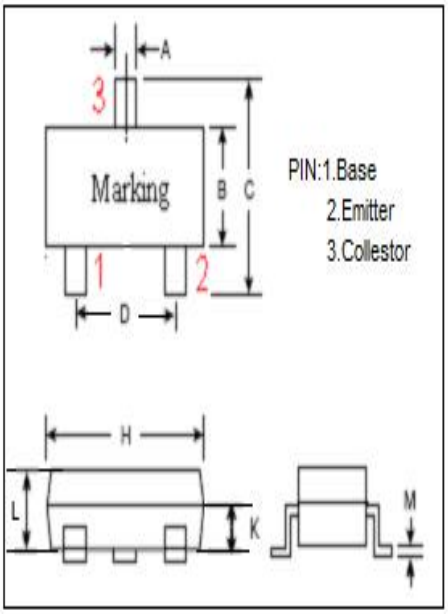
isc Silicon NPN Power Transistor 2SC4116

DESCRIPTION

- With SOT-323 packaging
- High collector-base voltage
- High power dissipation
- Low saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Power amplifier applications



DIM	MIN(mm)	MAX(mm)
A	0.20	0.40
B	1.24	1.32
C	2.06	2.21
D	1.26	1.34
H	2.08	2.16
K	0.51	0.56
L	0.80	0.90
M	0.10	0.25

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	0.15	A
P_C	Collector Power Dissipation @ T_C=25℃	0.1	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
BV_{CBO}	Collector-Base Breakdown Voltage	I_C= 0.1mA ; I_E= 0	60			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= 1mA ; I_B= 0	50			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= 0.1mA ; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 0.1A; I_B= 0.01A			0.25	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 0.1A; I_B= 0.01A			0.25	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 60V ; I_E= 0			0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			0.1	μA
h_{FE}	DC Current Gain	I_C= 2mA ; V_{CE}= 6V	70		700	

Classification of h_{FE}

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700