isc Silicon NPN RF Transistor 2SC3585

DESCRIPTION

- Collector Current I_C= 35mA
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 10V(Min)
- High gain:

| S21e | ^{2} = 5.5 dB (typical) (I_C=5mA,f=2GHz)

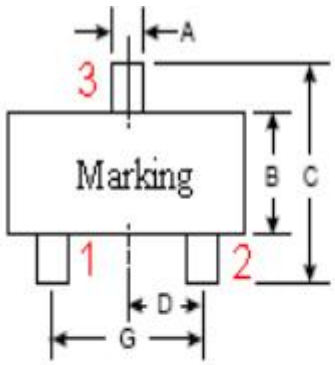
- Gain bandwidth product

fT = 10 GHZ (typical) (I_C=10mA,f=1GH)

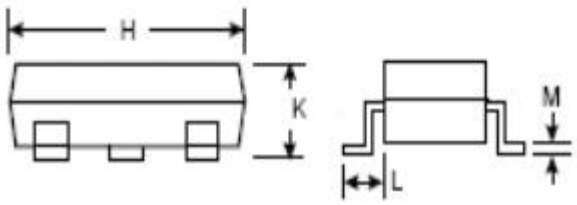
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed forVHF, UHF and CATV high frequency wideband low noise amplifier applications.



SC-59
1：Base
2：Emitter
3：Collector



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	10	V
V_{EBO}	Emitter-Base Voltage	1.5	V
I_C	Collector Current-Continuous	35	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

symbol	Min	Max
A	0.35	0.50
B	1.40	1.70
C	2.70	3.10
D	0.95	
G	1.70	2.10
H	2.70	3.10
K	1.00	1.30
L	0.5	0.85
M	0.10	0.35

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1uA ; I_E= 0	20			V
I_{CBO}	Collector Cutoff Current	V_{CB}= 10V; I_E= 0			0.1	μA
I_{EBO}	Emitter-Base Cutoff Current	V_{EB}= 1V; I_E= 0			0.1	μA
h_{FE}	DC Current Gain	I_C= 10mA ; V_{CE}= 6V	50	150	300	
f_T	Current-Gain—Bandwidth Product	V_{CE}=6V,I_C=10mA,f=1GHz		10		GHz
Cre	Output feedback capacitance	V_{CB}=10V,I_E=0mA,f=1MHz		0.65		pF
$\|S21e\|^2$	Power gain	V_{CE}=6V,I_C=10mA,f=2GHz		5.5		dB
NF	Noise factor	V_{CE}=6V,I_C=5mA,f=2GHz		2.5		dB

◆ **h_{FE} Classifications**

step	A	B	C	D	E
label	R43	R44	R45		
hFE	60-100	90-140	130-180	170-250	250-300