isc Silicon NPN Transistor 2SC1383

DESCRIPTION

- Low Collector Saturation Voltage
- Complement to Type 2SA683
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

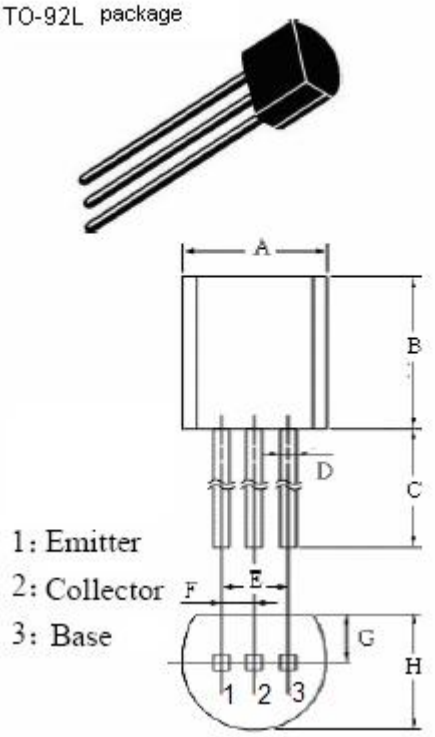
APPLICATIONS

- Designed for low frequency power amplification and driver amplification.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1	A
I_{CM}	Collector Current-Peak	1.5	A
P_C	Collector Power Dissipation @T_C=25℃	1	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

TO-92L package



DIM	mm	
	MIN	MAX
A	4.80	5.20
B	7.80	8.20
C	13.0	14.0
D	0.35	0.55
E	2.54	
F	1.27	
G	1.30	1.50
H	3.80	4.20

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 2m A ; I_B= 0	25			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 10 μ A ; I_E= 0	30			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 10 μ A ; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 0.5A; I_B= 50mA			0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 0.5A; I_B= 50mA			1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 20V; I_E= 0			0.1	μ A
h_{FE-1}	DC Current Gain	I_C= 0.5A ; V_{CE}= 10V	85		340	
h_{FE-2}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	50			
f_T	Current-Gain—Bandwidth Product	I_E= -50mA;V_{CB}= 10V,f= 200MHz		200		MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V;f= 1MHz		11		pF

◆ **h_{FE-1} Classifications**

Q	R	S
85-170	120-240	170-340

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