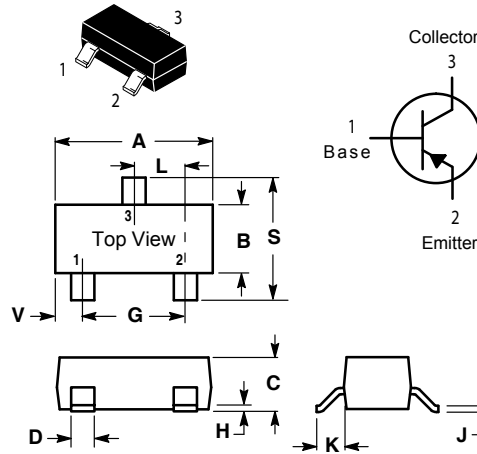


A suffix of "-C" specifies halogen & lead-free

## FEATURES

- RoHS Compliant Product
- Low noise : NF= 1dB(Typ.),10dB (Max.)
- Complementary to 2SC2712.
- Small Package.

(MAXIMUM RATINGS\*  $T_A=25^{\circ}\text{C}$  )



SOT-23		
Dim	Min	Max
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.450	0.600
L	0.890	1.020
S	2.100	2.500
V	0.450	0.600
All Dimension in mm		

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-50	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	150	mA
$P_D$	Total Device Dissipation	150	mW
$T_J, T_{stg}$	Junction and Storage Temperature	-55~125	$^{\circ}\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

## ELECTRICAL CHARACTERISTICS( $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-50\text{V}, I_E=0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=-6\text{V}, I_C=-2\text{mA}$	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$			-0.3	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}, I_C=-1\text{mA}$	80			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$			7	pF
Noise figure	NF	$V_{CE}=-6\text{V}, I_C=0.1\text{mA}, f=1\text{KHz}, R_g=10\text{K}\Omega$			10	dB

## CLASSIFICATION OF $h_{FE}$

Rank	O	Y	GR(G)
Range	70-140	120-240	200-400
Marking	SO	SY	SG

