

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

## FEATURES

High Frequency Application.  
VHF Band Amplifier application  
RoHS Compliant Product

Power dissipation

$$P_{CM} : 0.25 \text{ W}$$

Collector Current

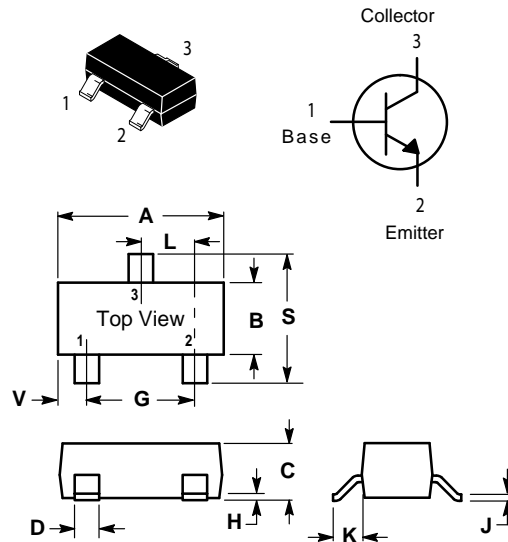
$$I_{CM} : 25\text{mA}$$

Collector-base voltage

$$V_{(BR)CBO} : 30 \text{ V}$$

Operating & storage junction temperature

$$T_j, T_{stg} : -55^\circ\text{C} \sim +150^\circ\text{C}$$



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		

## ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu\text{A}, I_B=0$	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	4			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=20\text{V}, I_E=0$			0.1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE}=15\text{V}, I_B=0$			0.1	$\mu\text{A}$
Collector cut-off current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=10\text{V}, I_C=7\text{mA}$	40		120	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			0.3	V
Base-emitter voltage	$V_{BE(on)}$	$I_C=7\text{mA}, V_{CE}=10\text{V}$			0.9	V
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_C=5\text{mA}$ $f=100\text{MHz}$	275			MHz

Marking

G11