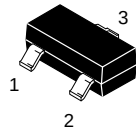


RoHS Compliant Product

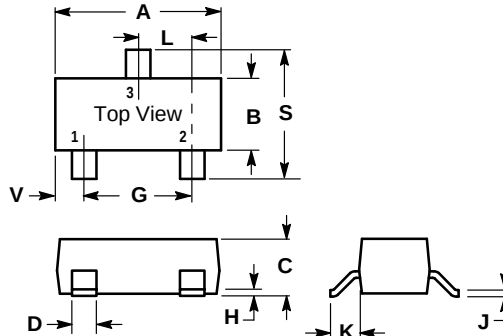
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Power Dissipation
 P_{CM} : 0.2 W ($T_a = 25^\circ\text{C}$)
- Collector Current
 I_{CM} : 0.15 A
- Collector-Base Voltage
 $V_{(BR)CBO}$: 60 V



- 1.BASE
2.EMITTER
3.COLLECTOR



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		

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

TYPE NUMBER	SYMBOL	TEST CONDITIONS	Min.	Typ.	Max.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\ \mu\text{A}$, $I_E = 0\ \text{A}$	60	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 0.1\ \text{mA}$, $I_B = 0\ \text{A}$	50	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\ \mu\text{A}$, $I_C = 0\ \text{A}$	5	-	-	V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 60\ \text{V}$, $I_E = 0\ \text{A}$	-	-	0.1	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE} = 50\ \text{V}$, $I_B = 0\ \text{A}$	-	-	0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 5\ \text{V}$, $I_C = 0\ \text{A}$	-	-	0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 6\ \text{V}$, $I_C = 2\ \text{mA}$	130	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100\ \text{mA}$, $I_B = 10\ \text{mA}$	-	-	0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 100\ \text{mA}$, $I_B = 10\ \text{mA}$	-	-	1	V
Transition Frequency	f_T	$V_{CE} = 10\ \text{V}$, $I_C = 1\ \text{mA}$, $f = 30\ \text{MHz}$	80	-	-	MHz
Operating and Storage Junction Temperature Range	T_J , T_{STG}	-	- 55 ~ +150			$^\circ\text{C}$

h_{FE} VALUES ARE CLASSIFIED AS FOLLOWS:

Rank	L	H
h_{FE}	130 ~ 200	200 ~ 400

Marking: HF

