Elektronische Bauelemente

C1815

200 mW, 150 mA, 60 V

NPN Plastic Encapsulated Transistor

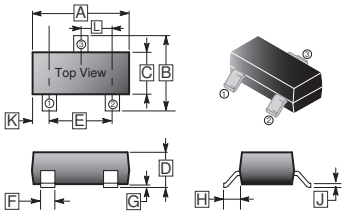
RoHS Compliant Product

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

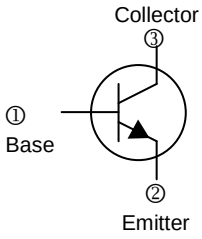
SOT-23

FEATURE

Power Dissipation



MARKING: HF



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.04	G	-	0.18
B	2.10	2.80	H	0.40	0.60
C	1.20	1.60	J	0.08	0.20
D	0.89	1.40	K	0.6 REF.	
E	1.78	2.04	L	0.85	1.15
F	0.30	0.50			

ABSOLUTE MAXIMUM RATINGS (T_A = 25℃ unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	150	mA
Collector Power Dissipation	Pc	200	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55 ~ 150	℃

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	60	-	-	V	I_C=100μA, I_E = 0A
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	50	-	-	V	I_C=0.1mA, I_B = 0A
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	V_{CB}=60 V, I_E = 0 A
Collector Cut-Off Current	I_{CEO}			0.1	μA	V_{CE}=50 V, I_B = 0 A
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	V_{EB}=5 V, I_C = 0 A
DC Current Gain	h_{FE}	130	-	400		V_{CE}=6V, I_C=2mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.25	V	I_C=100mA, I_B=10mA
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	1	V	I_C=100mA, I_B=10mA
Transition Frequency	f_T	80	-	-	MHz	V_{CE} = 10V, I_C = 1 mA, f = 30 MHz

CLASSIFICATION OF h_{FE}

Rank	L	H
Range	130-200	200-400

CHARACTERISTIC CURVES