Elektronische Bauelemente

S9014W

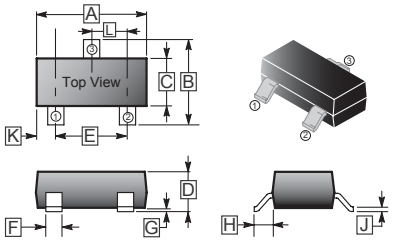
NPN Silicon
Plastic Encapsulated Transistor

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURE

Complementary to S9015W

SOT-323



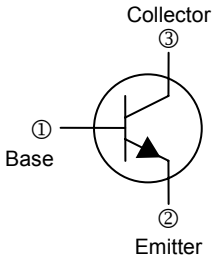
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650 TYP.	
F	0.20	0.40			

PACKAGING INFORMATION

Weight: 0.0074 g

MARKING CODE

J6



ABSOLUTE MAXIMUM RATINGS (at T_A = 25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current – Continuous	I_C	100	mA
Collector Power Dissipation	P_C	200	mW
Junction, Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	℃

ELECTRICAL CHARACTERISTICS (at T_A = 25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	50	-	-	V	I_C = 100μA, I_E = 0
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	45	-	-	V	I_C = 0.1mA, I_B = 0
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	I_E = 100μA, I_C = 0
Collector Cut-off Current	I_{CBO}	-	-	100	nA	V_{CB} = 50 V, I_E = 0
Collector Cut-off Current	I_{CEO}	-	-	100	nA	V_{CE} = 35V, I_B = 0
Emitter Cut-off Current	I_{EBO}	-	-	100	nA	V_{EB} = 3V, I_C = 0
Collector-emitter Saturation Voltage	V_{CE}(sat)	-	-	300	mV	I_C = 100mA, I_B = 5mA
Base-emitter Saturation Voltage	V_{BE}(sat)		-	1000	mV	I_C = 100mA, I_B = 5mA
DC Current Gain	h_{FE}	200	-	1000		V_{CE} = 5V, I_C = 1mA
Transition Frequency	fT	150	-	-	MHz	V_{CE} = 5V, I_C = 10mA, f = 30MHz

CLASSIFICATION OF hFE

Rank	L	H
hFE	200 - 450	450 - 1000

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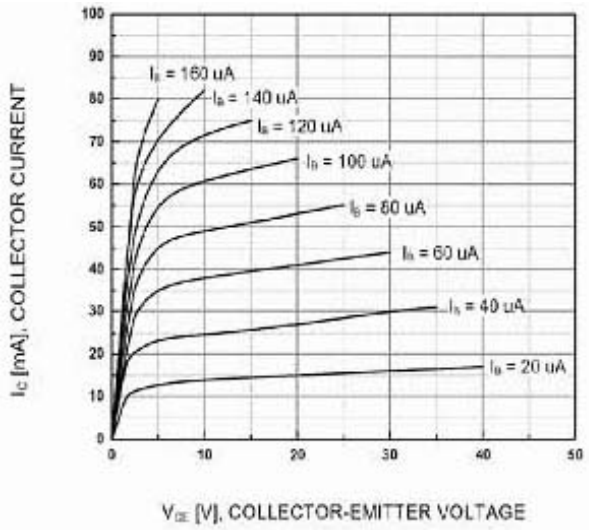
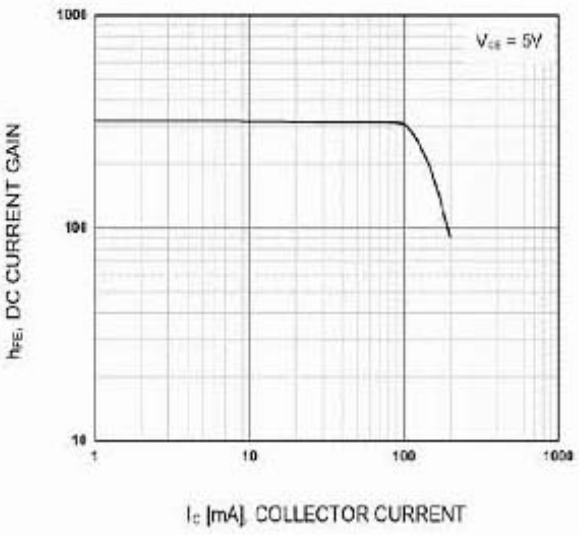
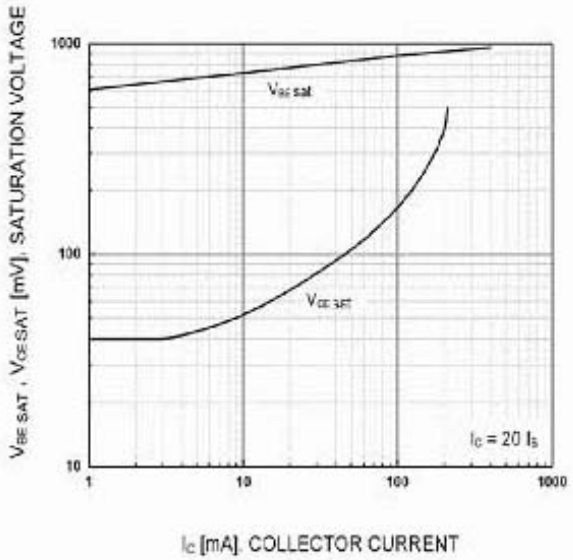
CHARACTERISTIC CURVES



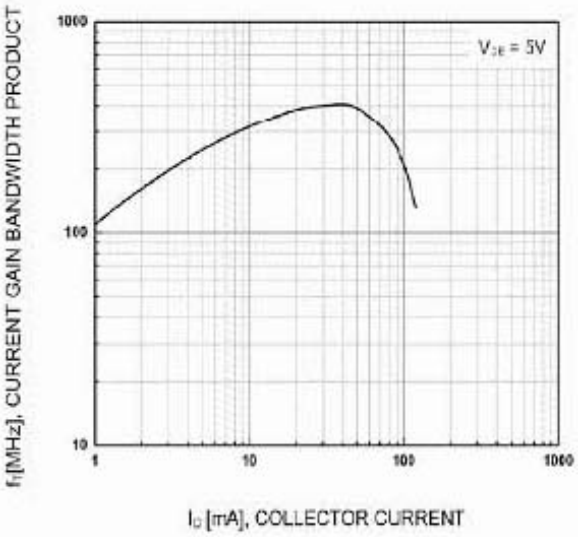
Static Characteristic



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product