Elektronische Bauelemente

2SA1235A

-0.2A , -60V

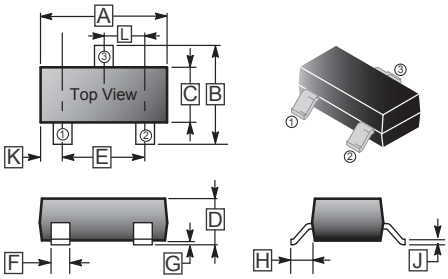
PNP Silicon Plastic Encapsulated Transistor

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

FEATURES

- Low Collector Current
- Low Collector Power Dissipation

SOT-23



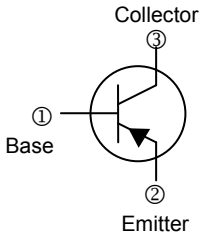
REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter Max.
A	2.80	3.00	G	0.10 REF.	
B	2.25	2.55	H	0.55 REF.	
C	1.20	1.40	J	0.08	0.15
D	0.90	1.15	K	0.5 REF.	
E	1.80	2.00	L	0.95 TYP.	
F	0.30	0.50			

CLASSIFICATION OF $h_{FE\ (1)}$

Product-Rank	2SA1235A-ME	2SA1235A-MF
Range	150~300	250~500
Marking	M • E	M • F

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-23	3K	7' inch



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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collector Current - Continuous	I_C	-200	mA
Collector Power Dissipation	P_C	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	°C / W
Junction and Storage Temperature	T_J, T_{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-60	-	-	V	I_C= -100μA, I_E=0
Collector to Emitter Breakdown	$V_{(BR)CEO}$	-50	-	-	V	I_C= -0.1mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-6	-	-	V	I_E= -100μA, I_C=0
Collector Cut-off Current	I_{CBO}	-	-	-100	nA	V_{CB}= -60V, I_E=0
Emitter Cut-off Current	I_{EBO}	-	-	-100	nA	V_{EB}= -6V, I_C=0
DC Current Gain	$h_{FE\ (1)}$	150	-	500		V_{CE}= -6V, I_C= -1mA
	$h_{FE\ (2)}$	90	-	-		V_{CE}= -6V, I_C= -0.1mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.3	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	-	200	-	MHz	V_{CE}= -6V, I_C= -10mA
Collector Output Capacitance	C_{ob}	-	4	-	pF	V_{CB}= -6V, I_E=0, f=1MHz