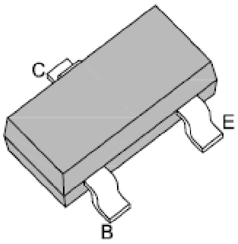
SMD General Purpose Transistor (PNP)

Features

- PNP Silicon Epitaxial Planar Transistor for Switching and Amplifier Applications



SOT-23

RoHS Compliant

Mechanical Data

Case:	SOT-23, Plastic Package
Terminals:	Solderable per MIL-STD-202G, Method 208
Weight:	0.008 gram

Marking Information

	BC856A	BC856B	BC857A	BC857B	BC857C	BC858A	BC858B	BC858C
Marking Code	3A	3B	3E	3F	3G	3J	3K	3L

Maximum Ratings *($T_{Ambient}$=25ºC unless noted otherwise)*

Symbol	Description	BC856	BC857	BC858	Unit	Conditions
$-V_{CBO}$	Collector-Base Voltage	80	50	30	V	
$-V_{CEO}$	Collector-Emitter Voltage	65	45	30	V	
$-V_{EBO}$	Emitter-Base Voltage	5	5	5	V	
$-I_C$	Collector Current	100			mA	
P_{tot}	Power Dissipation	350			mW	Note 1
T_J	Junction Temperature	150			° C	
T_{STG}	Storage Temperature Range	-55 to +150			° C	

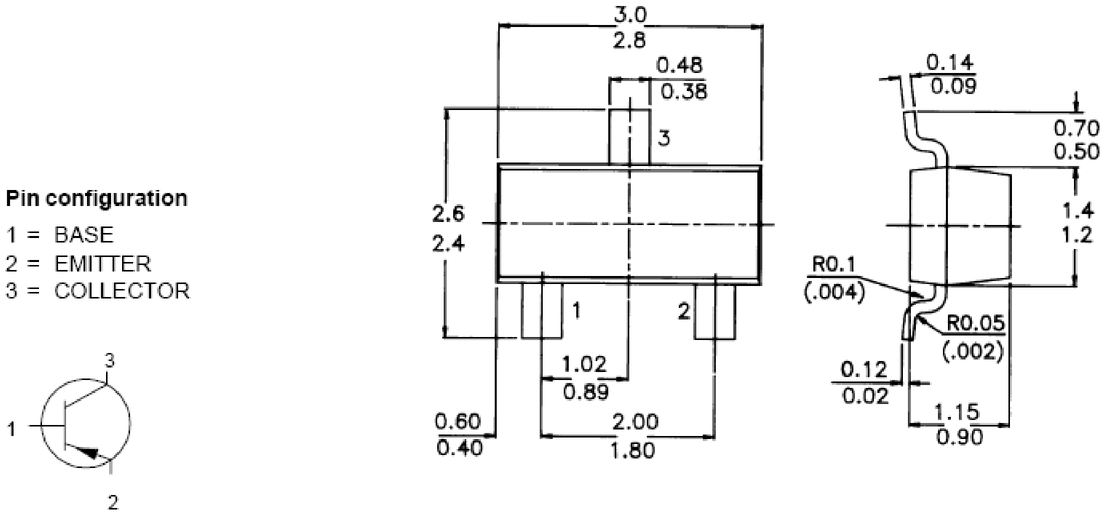
Note: 1. Package mounted on 99.5% Alumina 10 x 8 x 0.6mm.

Electrical Characteristics *(T $_{Ambient}$=25ºC unless noted otherwise)*

Symbol	Description		Min.	Typ.	Max.	Unit	Conditions
$-I_{CBO}$	Collector-Emitter Cut-off Current		-	-	15	nA	$-V_{CB}$=30V, I_E=0
h_{FE}	D.C. Current Gain	BC856/7/8, Suffix ‘A’	-	90	-		$-V_{CE}$=5V, $-I_C$=10μA
		BC856/7/8, Suffix ‘B’	-	150	-		
		BC857/8, Suffix ‘C’	-	270	-		
		BC856/7/8, Suffix ‘A’	110	180	220		$-V_{CE}$=5V, $-I_C$=2mA
		BC856/7/8, Suffix ‘B’	200	290	450		
		BC857/8, Suffix ‘C’	420	520	800		
$-V_{CE(sat)}$	Collector-Emitter Saturation Voltage		-	0.09	0.3	V	$-I_C$=10mA, $-I_B$=0.5mA
			-	0.25	0.65		$-I_C$=100mA, $-I_B$=5mA
$-V_{BE(sat)}$	Base-Emitter Saturation Voltage		-	0.7	-	V	$-I_C$=10mA, $-I_B$=0.5mA
			-	0.9	-		$-I_C$=100mA, $-I_B$=5mA
$-V_{BE(on)}$	Base-Emitter On Voltage		0.6	0.65	0.75	V	$-V_{CE}$=5V, $-I_C$=2mA
			-	-	0.82		$-V_{CE}$=5V, $-I_C$=10mA
f_T	Current Gain-Bandwidth Product		-	150	-	MHz	$-V_{CE}$=5V, $-I_C$=10mA, f=100MHz
C_{ob}	Collector Output Capacitance		-	4.5	-	pF	$-V_{CB}$=10V, I_E=0, f=1MHz
NF	Noise Figure		-	2.0	10	dB	$-V_{CE}$=5V, $-I_C$=0.2mA, R_G=2KΩ, f=1KHz

Dimensions in mm

SOT-23



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