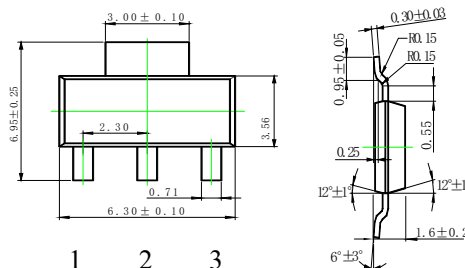


RoHS Compliant Product

Features

- * -60 Voltage V_{CE0} .
- * 1 Amps continuous current.
- * Complementary to PZT194

SOT-223



1 2 3

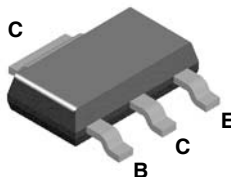
1. BASE
2. COLLECTOR
3. EMITTER

Mechanical Data

Case: SOT-223 Plastic Package

Weight: approx. 0.021g

Marking Code: 195



Maximum Ratings and Thermal Characteristics

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Junction Temperature	T_j	+150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	I_C	-1	A
Collector Current (Pulse)	I_C	-0.2	A
Total Power Dissipation	PD	2.0	W

Notes: Device on alumina substrate.

Electrical Characteristics ($T_J = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	-80	-	-	V	$I_C = -100\mu\text{A}$, $I_E = 0$
Collector-Emitter Breakdown Voltage	$*BV_{CEO}$	-60	-	-	V	$I_C = -10\text{mA}$, $I_B = 0$
Emitter-Base Breakdown Voltage	BV_{EBO}	-5	-	-	V	$I_E = -100\mu\text{A}$, $I_C = 0$
Collector-Emmitter Breakdown Voltage	I_{CBO}	-	-	-100	nA	$V_{CB} = -60\text{V}$, $I_E = 0$
Collector-Base Cutoff Current	I_{CES}	-	-	-100	nA	$V_{CES} = -60\text{V}$
Emitter-Base Cutoff Current	I_{EBO}	-	-	-100	nA	$V_{EB} = -4\text{V}$, $I_C = 0$
Collector Saturation Voltage 1	$*V_{CE(sat)1}$	-	-	-0.3	V	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$
Collector Saturation Voltage 2	$*V_{CE(sat)2}$	-	-	-0.6	V	$I_C = -1\text{A}$, $I_B = -100\text{mA}$
Base Saturation Voltage	$*V_{BE(sat)}$	-	-	-1.2	V	$I_C = -1\text{A}$, $I_B = -100\text{mA}$
Base-Emitter Voltage	$*V_{BE(on)}$	-	-	-1.0	V	$V_{CE} = -5\text{V}$, $I_C = -1\text{A}$
DC Current Gain 1	$*h_{FE1}$	100	-	-	-	$V_{CE} = -5\text{V}$, $I_C = 1\text{mA}$
DC Current Gain 2	$*h_{FE2}$	100	-	300	-	$V_{CE} = -5\text{V}$, $I_C = -500\text{mA}$
DC Current Gain 3	$*h_{FE3}$	80	-	-	-	$V_{CE} = -5\text{V}$, $I_C = -1\text{A}$
DC Current Gain 4	$*h_{FE4}$	15	-	-	-	$V_{CE} = -5\text{V}$, $I_C = -2\text{A}$
Gain-Bandwidth Product	fT	150	-	-	MHz	$V_{CE} = -10\text{V}$, $I_C = -50\text{mA}$, $f = 100\text{MHz}$
Output Capacitance	Cob	-	-	10	pF	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$

Characteristics Curve

