

**SOT-23 BIPOLAR TRANSISTORS
TRANSISTOR(PNP)**

FEATURES

* Power dissipation
 $P_{CM} : 0.2 \text{ W (Tamb=25°C)}$

MECHANICAL DATA

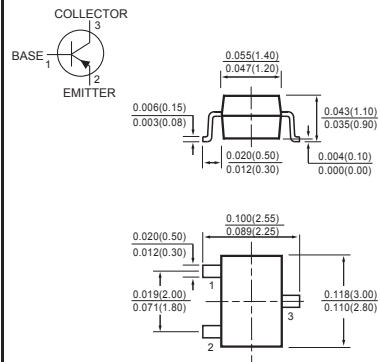
* Case: Molded plastic
* Epoxy: UL 94V-O rate flame retardant
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 0.008 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase , half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



SOT-23



Dimensions in inches and (millimeters)

MINIMUM RATINGS (@ TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	VALUE	UNITS
Collector-base voltage	V_{CBO}	-32	V
Collector-emitter voltage	V_{CEO}	-32	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current-continuous	I_C	-0.1	A
Power dissipation	P_C	0.25	W
Junction and storage temperature	T_J, T_{stg}	-55 - 150	°C

ELECTRICAL CHARACTERISTICS (@ TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS
Collector-base breakdown voltage ($I_C = -10\mu A, I_E = 0$)	$V_{(BR)CBO}$	-32	-	-	V
Collector-emitter breakdown voltage ($I_C = -1mA, I_B = 0$)	$V_{(BR)CEO}$	-32	-	-	V
Emitter-base breakdown voltage ($I_E = -10\mu A, I_C = 0$)	$V_{(BR)EBO}$	-5	-	-	V
Collector cut-off current ($V_{CB} = -32V, I_E = 0$)	I_{CBO}	-	-	-0.02	μA
Collector cut-off current ($V_{EB} = -4V, I_C = 0$)	I_{EBO}	-	-	-0.02	μA
DC current gain ($V_{CE} = -5V, I_C = -10\mu A$)	h_{FE}	100	-	-	-
DC current gain ($V_{CE} = -5V, I_C = -2mA$)		380	-	630	-
DC current gain ($V_{CE} = -1V, I_C = -50mA$)		110	-	-	-
Collector-emitter saturation voltage ($I_C = -10mA, I_B = -0.25mA$)	$V_{CE(sat)}$	-0.06	-	-0.25	V
Collector-emitter saturation voltage ($I_C = -50mA, I_B = -1.25mA$)	$V_{CE(sat)}$	-0.12	-	-0.55	V
Base-emitter saturation voltage ($I_C = -10mA, I_B = -0.25mA$)	$V_{BE(sat)}$	-0.6	-	-0.85	V
Base-emitter saturation voltage ($I_C = -50mA, I_B = -1.25mA$)		-0.68	-	-1.05	V
Base-emitter voltage ($V_{CE} = -5V, I_C = -10\mu A$)	$V_{BE(ON)}$	-	-0.55	-	V
Base-emitter voltage ($V_{CE} = -5V, I_C = -2mA$)		-0.6	-	-0.75	V
Base-emitter voltage ($V_{CE} = -1V, I_C = -50mA$)		-	-0.72	-	V
Transition frequency ($V_{CE} = -5V, I_C = -10mA, f = 100MHz$)	f_T	100	-	-	MHz
Collector capacitance ($V_{CB} = -10V, I_E = 0, f = 1MHz$)	C_C	-	4.5	-	pF
Emitter capacitance ($V_{EB} = -0.5V, I_C = 0, f = 1MHz$)	C_e	-	11	-	pF

Marking

BD

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