

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

FEATURES

- * Power dissipation
 $P_{CM} : \square \quad 0.2 \square \quad W \quad (T_{amb}=25^{\circ}C)$
- * Collector current
 $I_{CM} : \square \quad 0.7 \square \quad A$
- * Collector-base voltage
 $V_{(BR)CBO} : \square \quad 30 \square \quad V$
- * Operating and storage junction temperature range
 $T_{J, Tstg} : -55^{\circ}C \text{ to } +150^{\circ}C$

MECHANICAL DATA

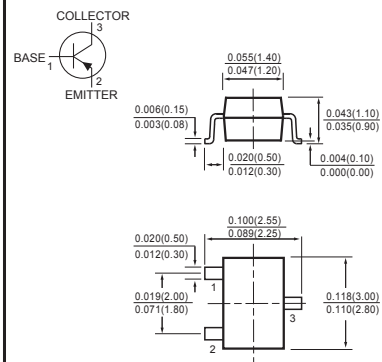
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.008 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



SOT-23



Dimensions in inches and (millimeters)

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

CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS
Collector-base breakdown voltage ($I_C= 100\mu A, I_E=0$)	$V_{(BR)CBO}$	30	-	-	V
Collector-emitter breakdown voltage ($I_C= 1mA, I_B=0$)	$V_{(BR)CEO}$	25	-	-	V
Emitter-base breakdown voltage ($I_E= 100\mu A, I_C=0$)	$V_{(BR)EBO}$	5	-	-	V
Collector cut-off current ($V_{CB}= 30V, I_E=0$)	I_{CBO}	-	-	0.1	μA
Emitter cut-off current ($V_{EB}= 5V, I_C=0$)	I_{EBO}	-	-	0.1	μA
DC current gain ($V_{CE}= 1V, I_C= 100mA$)	$h_{FE(1)}^*$	110	-	400	-
DC current gain ($V_{CE}= 1V, I_C= 700mA$)	$h_{FE(2)}^*$	50	-	-	-
Collector-emitter saturation voltage ($I_C= 700mA, I_B= 70mA$)	$V_{CE(sat)}^*$	-	-	0.6	V
Base-emitter voltage ($V_{CE}= 6V, I_C= 10mA$)	$V_{BE(on)}^*$	0.6	-	0.7	V
Transition frequency ($V_{CE}= 6V, I_C= 10mA$)	f_T	140	-	-	MHz

* Pulse test: Pulse width $\leq 350\mu s$, Duty Cycle $\leq 2\%$.

CLASSIFICATION OF h_{FE}

RANK	DV1	DV2	DV3	DV4	DV5
Range	110-180	135-220	170-270	200-320	250-400

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