

## SOT-23 BIPOLAR TRANSISTORS TRANSISTOR(PNP)

#### **FEATURES**

\* Power dissipation

Рсм:

0.2 W (Tamb=25°C)

\* Collector current

0.7 A

\* Collector-base voltage

V<sub>(BR)CBO</sub>: 30 V

\* Operating and storage junction temperature range T<sub>J</sub>,Tstg: -55°C to +150°C

#### **MECHANICAL DATA**

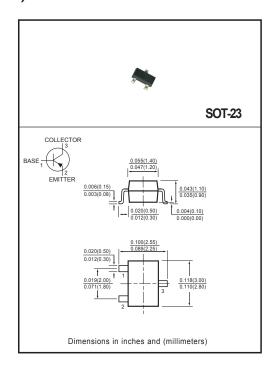
\* Case: Molded plastic

\* 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%.



#### **ELECTRICAL CHARACTERISTICS** ( 0 TA = 25 $^{0}$ C unless otherwise noted )

CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS
Collector-base breakdown voltage (I <sub>C</sub> = 100μA, I <sub>E</sub> =0)	V <sub>(BR)CBO</sub>	30	-	-	V
Collector-emitter breakdown voltage (I <sub>C</sub> = 1mA, I <sub>B</sub> =0)	V <sub>(BR)CEO</sub>	25	-	-	٧
Emitter-base breakdown voltage (I <sub>E</sub> = 100μA, I <sub>C</sub> =0)	V <sub>(BR)EBO</sub>	5	-	-	V
Collector cut-off current (V <sub>CB</sub> = 30V, I <sub>E</sub> =0)	I <sub>CBO</sub>	-	-	0.1	μА
Emitter cut-off current (V <sub>EB</sub> = 5V, I <sub>C</sub> =0)	I <sub>EBO</sub>	-	-	0.1	μА
DC current gain (V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA)	h <sub>FE(1)</sub> *	110	-	400	-
DC current gain (V <sub>CE</sub> = 1V, I <sub>C</sub> = 700mA)	h <sub>FE(2)</sub> *	50	-	-	-
Collector-emitter saturation voltage (I <sub>C</sub> = 700mA, I <sub>B</sub> = 70mA)	V <sub>CE(sat)</sub> *	-	-	0.6	٧
Base-emitter voltage (V <sub>CE</sub> = 6V, I <sub>C</sub> = 10mA)	V <sub>BE(on)</sub> *	0.6	-	0.7	V
Transition frequency (V <sub>CE</sub> = 6V, I <sub>C</sub> = 10mA)	f <sub>T</sub>	140	-	-	MHz

<sup>\*</sup> Pulse teat: Pulse width ≤350μs, Duty Cycle ≤2%.

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

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