

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

FEATURES

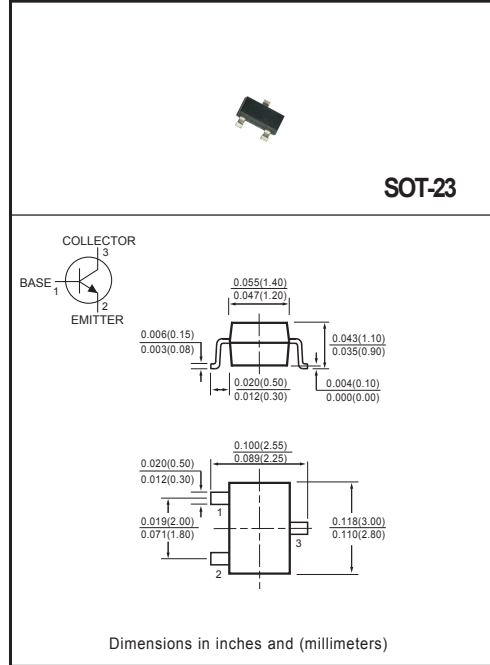
- * Power dissipation
P_{CM} : □ 0.25 □ W (T_{amb}=25°C)
- * Collector current
I_{CM} : □ 0.1 □ A
- * Collector-base voltage
V_{(BR)CBO} : □ 32 □ V
- * Operating and storage junction temperature range
T_J, T_{stg}: -55°C to +150°C

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, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



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

CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS
Collector-base breakdown voltage (I _C = 10μA, 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 = 10μA, 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 = 10μA)	h _{FE}	40	-	-	-
DC current gain (V _{CE} = 5V, I _C = 2mA)		250	-	460	-
DC current gain (V _{CE} = 5V, I _C = 50mA)		100	-	-	-
Collector-emitter saturation voltage (I _C = 10mA, I _B = 0.25mA)	V _{CE(sat)}	-	-	0.35	V
Collector-emitter saturation voltage (I _C = 50mA, I _B = 1.25mA)		-	-	0.55	V
Base-emitter saturation voltage (I _C = 10mA, I _B = 0.25mA)	V _{BE(sat)}	-	-	0.85	V
Base-emitter saturation voltage (I _C = 50mA, I _B = 1.25mA)		-	-	1.05	V
Base-emitter voltage (V _{CE} = 5V, I _C = 2μA)	V _{BE}	0.55	-	0.75	V
Transition frequency (V _{CE} = 5V, I _C = 10mA, f=100MHz)	f _T	100	-	-	MHz
Output capacitance (V _{CB} = 10V, I _E = 0, f=1MHz)	C _{ob}	-	-	5	pF

Marking	AC
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