

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

FEATURES

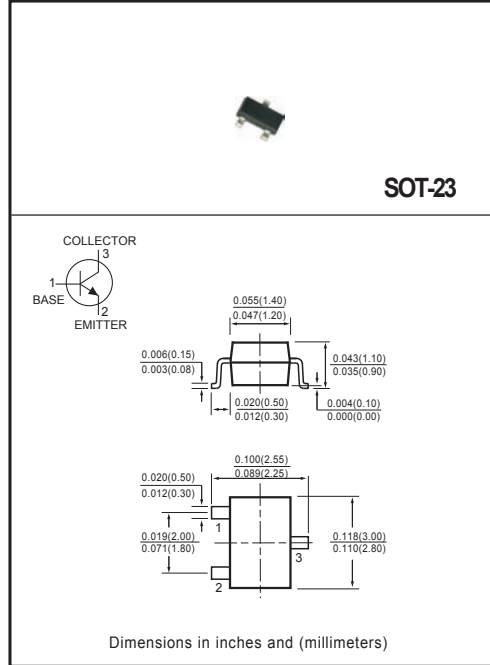
- * Power dissipation
P_{CM} : □ 0.2 □ W (T_{amb}=25°C)
- * Collector current
I_{CM} : □ 0.15 □ A
- * Collector-base voltage
V_{(BR)CBO} : □ 60 □ V
- * Operating and storage junction temperature range
T_J, T_{stg}: -55°C to +150°C

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



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

CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS
Collector-base breakdown voltage(I _C = 1mA, I _E =0)	V _{(BR)CBO}	60	-	-	V
Collector-emitter breakdown voltage(I _C = 0.1mA, I _B =0)	V _{(BR)CEO}	50	-	-	V
Emitter-base breakdown voltage(I _C = 0.1mA, I _B =0)	V _{(BR)EBO}	5	-	-	V
Collector cut-off current(V _{CE} = 60V, I _E =0)	I _{CBO}	-	-	0.1	μA
Collector cut-off current(V _{CE} = 45V, I _E =0)	I _{CEO}	-	-	0.1	μA
Emitter cut-off current(V _{EB} = 5V, I _C =0)	I _{EBO}	-	-	0.1	μA
DC current gain(V _{CE} = 6V, I _C = 1mA)	h _{FE}	130	-	400	-
DC current gain(V _{CE} = 6V, I _C = 0.1mA)		40	-	-	-
Collector-emitter saturation voltage(I _C =100 mA, I _B = 10mA)	V _{CE(sat)}	-	-	0.3	V
Base-emitter saturation voltage(I _C = 100 mA, I _B = 10mA)	V _{BE(sat)}	-	-	1	V
Base-emitter voltage(I _E = 310 mA)	V _{BEF}	-	-	1.4	V
Transition frequency(V _{CE} = 6V, I _C = 10mA, f= 30MHz)	f _T	150	-	-	MHz

CLASSIFICATION OF h_{FE(1)}

RANK	L	H
Range	130~200	200~400
Marking	CR	

Note : "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2007-3

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