RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

2SD596

SOT-23 BIPOLAR TRANSISTORS
TRANSISTOR(PNP)

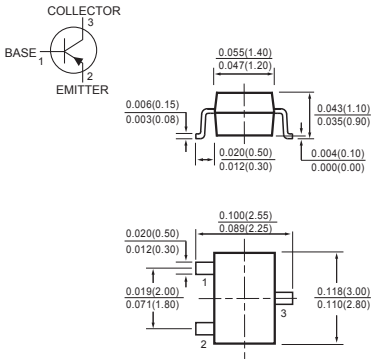
FEATURES

* Power dissipation
  P_{CM} : 0.2 W (Tamb=25°C)
* Collector current
  I_{CM} : 0.7 A
* Collector-base voltage
  $V_{(BR)CBO}$: 30 V
* Operating and storage junction temperature range
  T_J,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

SOT-23



Dimensions in inches and (millimeters)

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 (@ TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS
Collector-base breakdown voltage (I_C= 100μA, 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= 100μA, 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 teat: Pulse width ≤350μs, Duty Cycle ≤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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