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2N3792
Silicon PNP Transistor
Audio Amplifier Output
TO–3 Type Package

Description:

The 2N3792 is a silicon PNP power transistor in a TO–3 type package designed for use in medium–speed switching and amplifier applications.

Applications:

- Total Switching Time @ 3.0A = 1.0μs (typ)
- h_{FE} (min) = 50 @ 1.0A
- Low $V_{CE(sat)}$ = 0.5V (typ) @ I_C = 5.0A, I_B = 0.5A
- Excellent Safe Area Limits

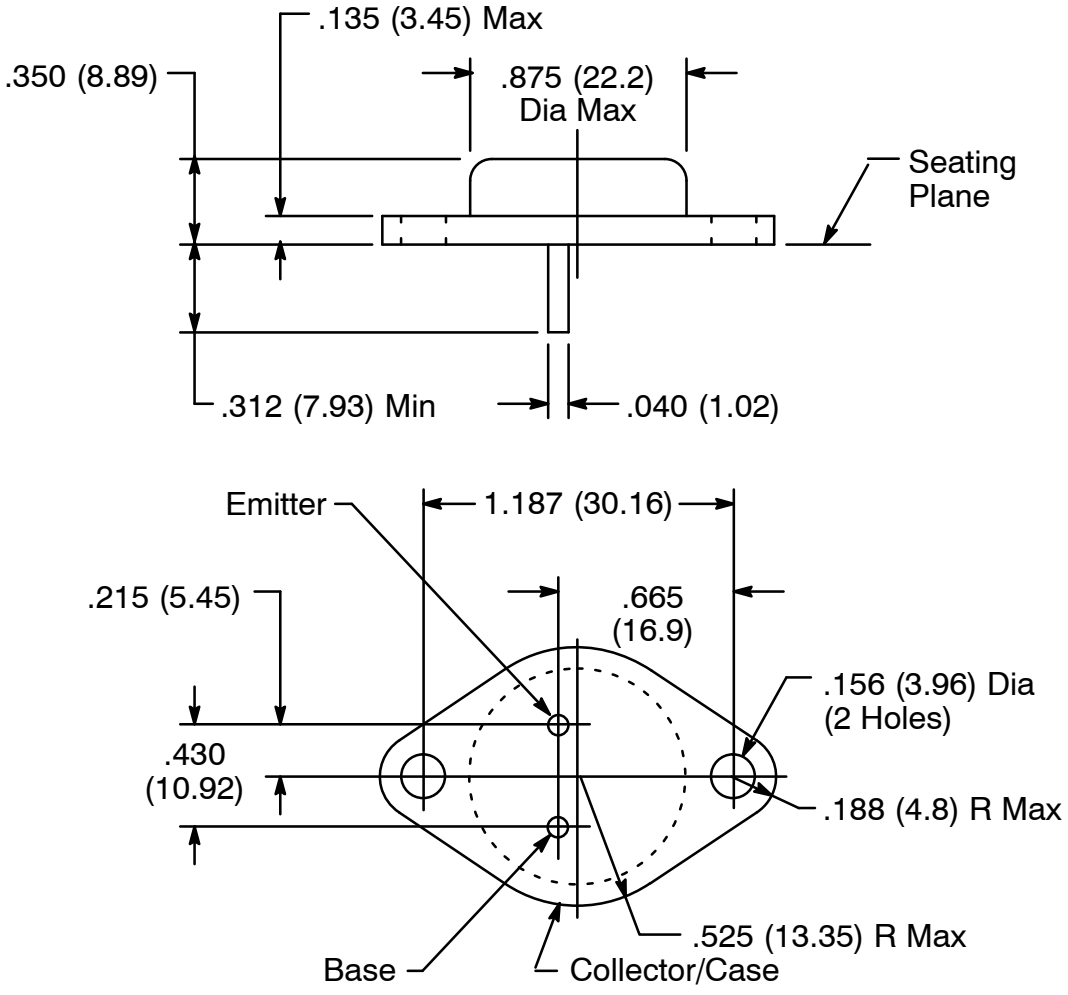
Absolute Maximum Ratings:

Collector–Base Voltage, V_{CB} 80V
Collector–Emitter Voltage, V_{CEO} 80V
Emitter–Base Voltage, V_{EB} 7V
Continuous Collector Current, I_C 10A
Continuous Base Current, I_B 4A
Power Dissipation, P_C 150W
Junction Temperature Range, T_j . . . . . –65°C to +200°C
Storage Temperature Range, T_{stg} . . . . . –65°C to +200°C
Thermal resistance, Junction–to–Case, R_{thJC} . . . . . 1.17°C/W

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Collector–Emitter Sustaining Voltage	$V_{CEO(sus)}$	I_C = 200mA, I_B = 0, Note 1	80	–	–	V
Collector–Emitter Cutoff Current	I_{CEX}	V_{CE} = 80V, V_{BE} = –1.5V	–	–	1.0	mA
		V_{CE} = 80V, V_{BE} = –1.5V, T_C = +150°C	–	–	5.0	mA
Emitter–Base Cutoff Current	I_{EBO}	V_{EB} = 7V	–	–	5	mA
DC Current Gain	h_{FE}	V_{CE} = 2V, I_C = 1A, Note 1	50	–	180	
		V_{CE} = 2V, I_C = 3A, Note 1	30	–	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 5A, I_B = 500mA, Note 1	–	–	1.0	V
Base–Emitter ON Voltage	$V_{BE(on)}$	V_{CE} = 2V, I_C = 5A	–	–	1.8	V
		V_{CE} = 4V, I_C = 10A	–	–	4.0	V
Current Gain Bandwidth Product	f_T	V_{CE} = 10V, I_C = 500mA, f = 1MHz	4	–	–	MH_Z

Note 1. Pulse test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%.


.135 (3.45) Max
.350 (8.89)
.875 (22.2)
Dia Max
Seating
Plane
.312 (7.93) Min
.040 (1.02)
Emitter
1.187 (30.16)
.215 (5.45)
.665
(16.9)
.156 (3.96) Dia
(2 Holes)
.430
(10.92)
.188 (4.8) R Max
.525 (13.35) R Max
Base
Collector/Case