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2N6259
Silicon NPN Transistor
General Purpose, High Power Audio, Disk Head Positioner for Linear Applications

Description:

The 2N6259 is a silicon NPN power transistor in a TO3 type package designed for high power audio, disk head positioners, and other linear applications.

Absolute Maximum Ratings:

Collector–Emitter Voltage, $V_{CEO(sus)}$ 150V
Collector–Emitter Voltage, V_{CEX} 170V
Collector–Base Voltage, V_{CBO} 170V
Emitter–Base Voltage, V_{EBO} 7V
Collector Current, I_C
  Continuous 16A
  Peak (Note 1) 30A
Base Current, I_B
  Continuous 4A
  Peak (Note 1) 15A
Total Power Dissipation (T_C = +25°C), P_D 150W
  Derate Above 25°C . . . . . 0.857 W/°C
Operating Junction Temperature Range, T_J . . . . . –65° to +200°C
Storage Temperature Range, T_{STG} . . . . . –65° to +200°C
Thermal Resistance, Junction–to–Case, R_{thJC} . . . . . 1.17°C/W

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

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OFF Characteristics						
Collector–Emitter Sustaining Voltage	$V_{CEO(sus)}$	I_C = 100mA, I_B = 0, Note 1	150	–	–	V
Collector Cutoff Current	I_{CEX}	V_{CE} = 150V, $V_{BE(off)}$ = 1.5V	–	–	2.0	mA
	I_{CEO}	V_{CE} = 130V, I_B = 0	–	–	10	mA
	I_{CBO}	V_{CB} = 150V, I_E = 0	–	–	2.0	mA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 7V, I_C = 0	–	–	5.0	mA
ON Characteristics (Note 1)						
DC Current Gain	h_{FE}	V_{CE} = 2V, I_C = 8A	15	–	60	–
		V_{CE} = 4V, I_C = 16A	10	–	–	–
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 8A, I_B = 800mA	–	–	1.0	V
		I_C = 16A, I_B = 3.2A	–	–	2.5	V
Base–Emitter On Voltage	$V_{BE(on)}$	V_{CE} = 2V, I_C = 8A	–	–	2.0	V

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