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2N2925

Silicon NPN Transistor General Purpose TO-92 Type Package

Absolute Maximum Ratings:

Collector-Emitter Voltage, V_{CEO}	25V
Collector-Base Voltage, V_{CBO}	25V
Emitter-Base Voltage, V_{EBO}	5V
Continuous Collector Current (Note 1), I_C	100mA
Total Power Dissipation ($T_A \leq +25^\circ\text{C}$), P_T	360mW
Derate Above $+25^\circ\text{C}$	3.6mW/ $^\circ\text{C}$
Total Power Dissipation ($T_A \leq +55^\circ\text{C}$), P_T	250mW
Derate Above $+25^\circ\text{C}$	3.6mW/ $^\circ\text{C}$
Operating Junction Temperature Range, T_J	-55° to $+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ\text{C}$
Lead Temperature (During Soldering, 1/16" from case, 10sec max), T_L	$+260^\circ\text{C}$

Note 1. Determined from power limitations due to saturation voltages at this current

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 25\text{V}$	-	-	0.1	μA
		$V_{CB} = 25\text{V}, T_A = +100^\circ\text{C}$	-	-	15	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}$	-	-	0.1	μA
DC Forward Current Transfer Ratio	h_{FE}	$V_{CE} = 4.5\text{V}, I_C = 2\text{mA}$	-	215	-	
Small-Signal Forward Current Transfer Ratio	h_{fe}	$V_{CE} = 10\text{V}, I_C = 2\text{mA}, f = 1\text{kHz}$	235	-	-	
Input Impedance	h_{fb}	$V_{CE} = 10\text{V}, I_C = 2\text{mA}, f = 1\text{kHz}$	-	15	-	Ω
Gain Bandwidth Product	f_T	$V_{CB} = 5\text{V}, I_C = 4\text{mA}$	-	160	-	MHz
Noise Figure	NF	$I_C = 100\mu\text{A}, V_{CE} = 5\text{V},$ $R_g = 2000\Omega, f = 10\text{kHz},$ $BW = 1\text{Hz}$	-	2.6	-	dB
Collector Capacitance	C_{cbo}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	4.5	7.0	10	pF

