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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, $T_J$ .....	$-55^\circ$ to $+150^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ 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	$\mu\text{A}$
		$V_{CB} = 25\text{V}, T_A = +100^\circ\text{C}$	-	-	15	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5\text{V}$	-	-	0.1	$\mu\text{A}$
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	-	$\Omega$
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

