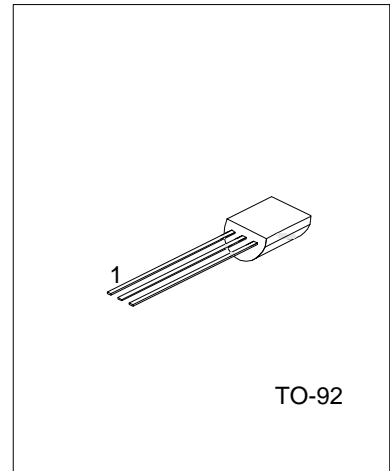




9018

NPN EPITAXIAL PLANAR TRANSISTOR

AM/FM AMPLIFIER, LOCAL OSCILLATOR OF FM/VHF TUNER



FEATURES

* High Current Gain Bandwidth Product
 $f_T = 1.1\text{GHz}$ (Typ)

ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
9018L-x-T92-B	9018G-x-T92-B	TO-92	E	B	C	Tape Box
9018L-x-T92-K	9018G-x-T92-K	TO-92	E	B	C	Bulk
9018L-x-T92-R	9018G-x-T92-R	TO-92	E	B	C	Tape Reel

Note: Pin Assignment: E: EMITTER B: BASE C: COLLECTOR

<p>9018L-x-T92-B</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Rank (4) Lead Free 	<ul style="list-style-type: none"> (1) B: Tape Box, T: Tape Reel, R: Tape Reel (2) T92: TO-92 (3) x: refer to Classification of Hfe (4) G: Halogen Free, L: Lead Free
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■ ABSOLUTE MAXIMUM RATING ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Operating Temperature	T_{OPR}	-20 ~ +85	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu\text{A}$, $I_E=0$	30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1\text{mA}$, $I_B=0$	15			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu\text{A}$, $I_C=0$	5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=12\text{V}$, $I_E=0$			50	nA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=10\text{mA}$, $I_B=1\text{mA}$			0.5	V
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}$, $I_C=1\text{mA}$	28	100	198	
Current Gain Bandwidth Product	f_T	$V_{CE}=5\text{V}$, $I_C=5\text{mA}$	700	1100		MHz
Output Capacitance	C_{OB}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		1.3	1.7	pF

■ CLASSIFICATION of h_{FE}

RANK	D	E	F	G	H	I
RANGE	28-45	39-60	54-80	72-108	97-146	132-198

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