

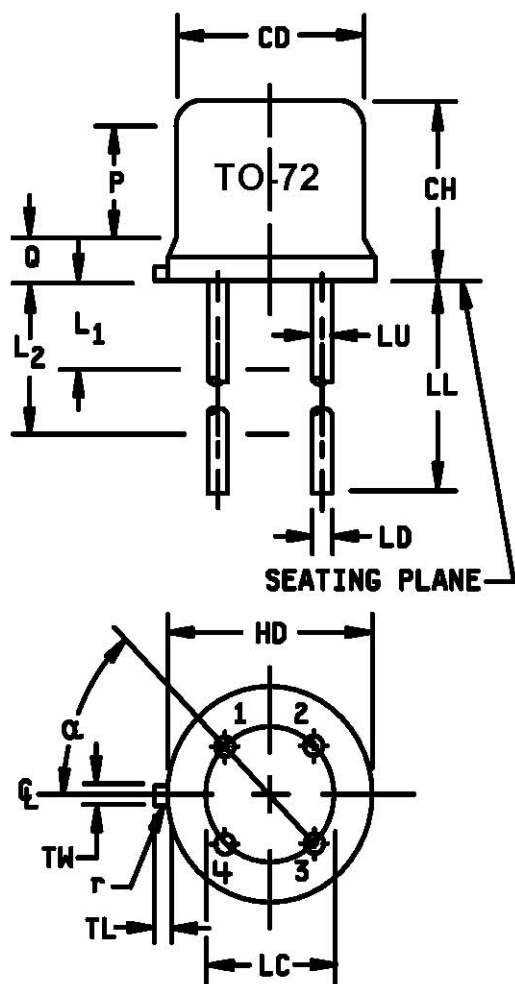
DYNAMIC CHARACTERISTICS

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Magnitude of Small-Signal Short-Circuit - Forward Current Transfer Ratio $I_C = 4\text{mA dc}$, $V_{CE} = 10\text{V dc}$, $f = 100\text{MHz}$	$ h_{fe} $	6.0	18	
Output Capacitance $V_{CB} = 0\text{V dc}$, $I_E = 0$, $100\text{kHz} \leq f \leq 1.0\text{MHz}$ $V_{CB} = 10\text{V dc}$, $I_E = 0$, $100\text{kHz} \leq f \leq 1.0\text{MHz}$	C_{obo1} C_{obo2}		3.0 1.7	pF
Input Capacitance $V_{EB} = 0.5\text{V dc}$, $I_C = 0$, $100\text{kHz} \leq f \leq 1.0\text{MHz}$	C_{ibo}		2.0	pF
Noise Figure (1) $V_{CE} = 6\text{V}$, $I_C = 1.0\text{mA}$, $f = 60\text{MHz}$ $g_s = 2.5\text{mmho}$	NF		6.0	dB
Small-Signal Power Gain (1) $V_{CB} = 12\text{V}$, $I_C = 6.0\text{mA}$, $f = 200\text{MHz}$	G_{pe}	15		dB
Collector-Base Time Constant (1) $V_{CB} = 10\text{V}$, $I_E = -4.0\text{mA}$, $f = 79.8\text{MHz}$	$R_{b'CC}$		25	ps
Oscillator Power Output (1) $V_{CB} = 1.5\text{V}$, $I_C = 8.0\text{mA}$, $f \geq 500\text{MHz}$	P_o	30		mW
Collector Efficiency $V_{CB} = 15\text{V}$, $I_C = 8.0\text{mA}$, $f > 500\text{MHz}$	η	25		%

NOTES:

(1) For more detail see MIL-PRF-19500/301

PACKAGE DIMENSIONS



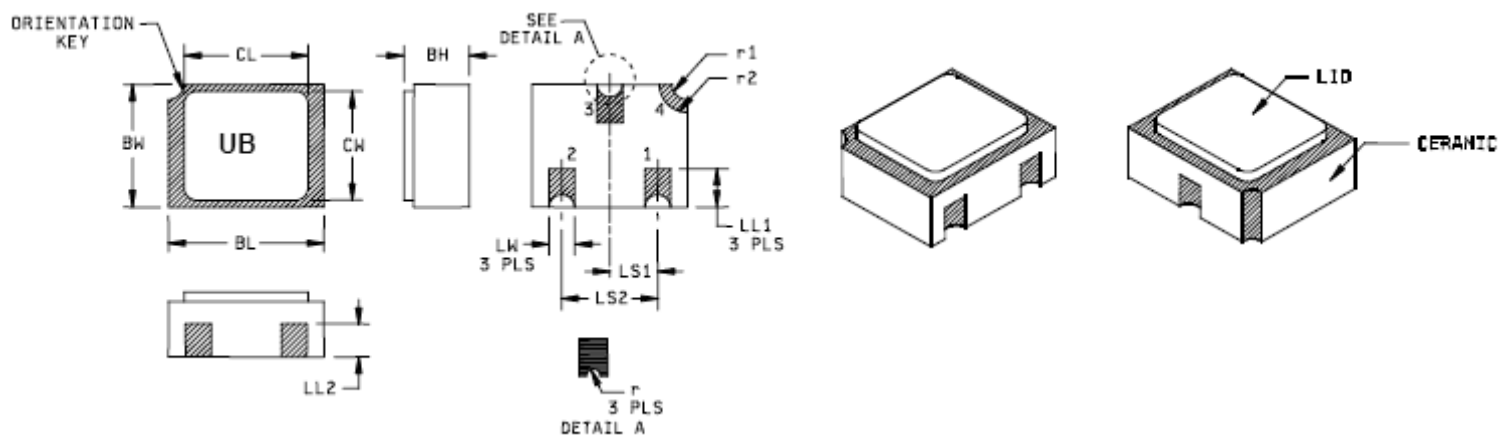
Symbol	Dimensions				Note
	Inches		Millimeters		
	Min	Max	Min	Max	
CD	.178	.195	4.52	4.95	5
CH	.170	.210	4.32	5.33	
HD	.209	.230	5.31	5.84	5
LC	.100 TP		2.54 TP		7,8
LD	.016	.021	.406	.533	7,8
LL	.500	.750	12.70	19.05	7,8
LU	.016	.019	.406	.483	
L1		.050		1.27	
L2	.250		6.35		
P	.100		2.54		
Q		.040		1.02	5
TL	.028	.048	.71	1.22	
TW	.036	.046	.91	1.17	
r		.007		.18	
α	45° TP				

NOTES:

1. Dimension are in inches.
2. Millimeters are given for general information only.
3. Beyond r (radius) maximum, TH shall be held for a minimum length of .011 inch (0.28 mm).
4. Dimension TL measured from maximum HD.
5. Body contour optional within zone defined by HD, CD, and Q.
6. Leads at gauge plane .054 +.001 -.000 inch (1.37 +0.025 -0.00 mm) below seating plane shall be within .007 inch (0.18mm) radius of true position (TP) at maximum material condition (MMC) relative to tab at MMC.
7. Dimension LU applies between L1 and L2. Dimension LD applies between L2 and LL minimum. Diameter is uncontrolled in L1 and beyond LL minimum.
8. All four leads.
9. Dimension r (radius) applies to both inside corners of tab.
10. In accordance with ASME Y14.5M, diameters are equivalent to ϕ x symbology.
11. Lead 1 = emitter, lead 2 = base, lead 3 = collector, lead 4 = case (electrically connected).

FIGURE 1. Physical dimensions for 2N918 (TO-72).

PACKAGE DIMENSIONS



Symbol	Dimensions				Note
	Inches		Millimeters		
	Min	Max	Min	Max	
BH	.046	.056	1.17	1.42	
BL	.115	.128	2.92	3.25	
BW	.085	.108	2.16	2.74	
CL		.128		3.25	
CW		.108		2.74	
LL ₁	.022	.038	0.56	0.97	
LL ₂	.017	.035	0.4	0.89	

Symbol	Dimensions				Note
	Inches		Millimeters		
	Min	Max	Min	Max	
LS ₁	.036	.040	0.91	1.02	
LS ₂	.071	.079	1.80	2.01	
LW	.016	.024	0.41	0.61	
r		.008		.203	
r1		.012		.305	
r2		.022		.559	

NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Hatched areas on package denote metallized areas.
4. Lid material: Kovar.
5. Pad 1 = Base, Pad 2 = Emitter, Pad 3 = Collector, Pad 4 = Shielding connected to the lid.
6. In accordance with ASME Y14.5M, diameters are equivalent to ϕ x symbology.

FIGURE 2. Physical dimensions for 2N918UB, surface mount.