

# NUP2301MW6T1

## THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance Junction-to-Ambient	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$
Lead Solder Temperature Maximum 10 Seconds Duration	$T_L$	260	$^{\circ}\text{C}$
Junction Temperature	$T_J$	-55 to +150	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_J = 25^{\circ}\text{C}$ unless otherwise noted) (Each Diode)

Characteristic	Symbol	Min	Typ	Max	Unit
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### OFF CHARACTERISTICS

Reverse Breakdown Voltage ( $I_{(BR)} = 100 \mu\text{A}$ )	$V_{(BR)}$	70	–	–	Vdc
Reverse Voltage Leakage Current ( $V_R = 70 \text{ Vdc}$ ) ( $V_R = 25 \text{ Vdc}$ , $T_J = 150^{\circ}\text{C}$ ) ( $V_R = 70 \text{ Vdc}$ , $T_J = 150^{\circ}\text{C}$ )	$I_R$	– – –	– – –	2.5 30 50	$\mu\text{Adc}$
Capacitance (between I/O pins) ( $V_R = 0 \text{ V}$ , $f = 1.0 \text{ MHz}$ )	$C_D$	–	1.0	2.0	pF
Capacitance (between I/O pin and ground) ( $V_R = 0 \text{ V}$ , $f = 1.0 \text{ MHz}$ )	$C_D$	–	1.6	3	pF
Forward Voltage ( $I_F = 1.0 \text{ mAdc}$ ) ( $I_F = 10 \text{ mAdc}$ ) ( $I_F = 50 \text{ mAdc}$ ) ( $I_F = 150 \text{ mAdc}$ )	$V_F$	– – – –	– – – –	715 855 1000 1250	mVdc

2. FR-5 =  $1.0 \times 0.75 \times 0.062 \text{ in.}$

3. Alumina =  $0.4 \times 0.3 \times 0.024 \text{ in. } 99.5\% \text{ alumina.}$

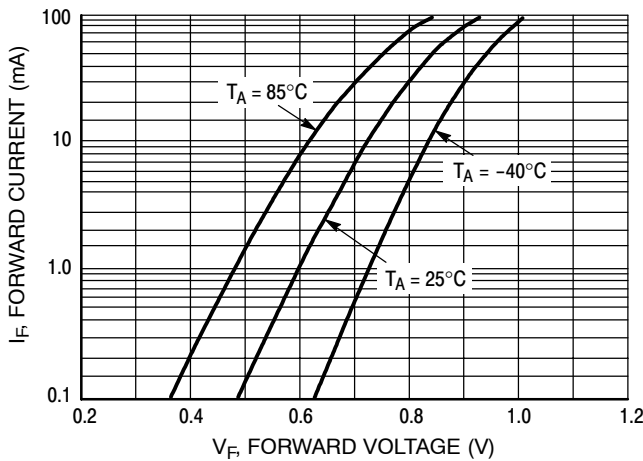


Figure 1. Forward Voltage

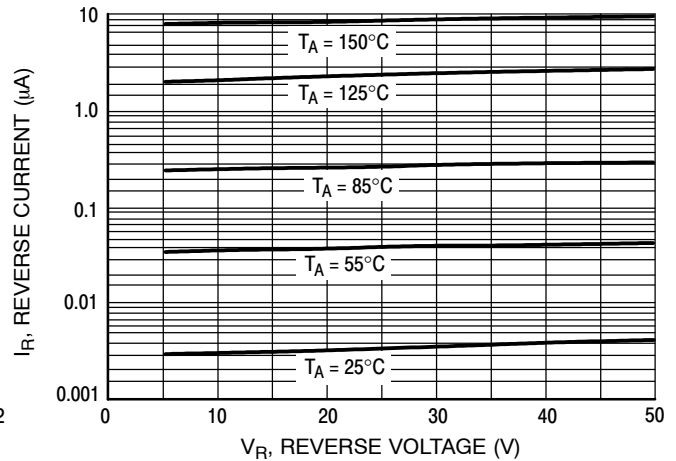


Figure 2. Leakage Current

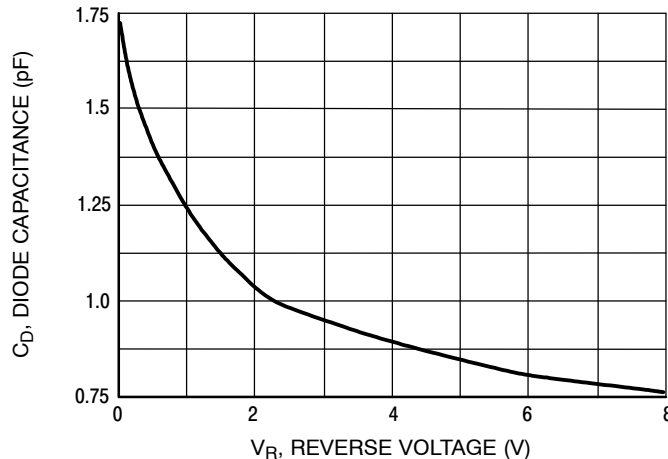


Figure 3. Capacitance

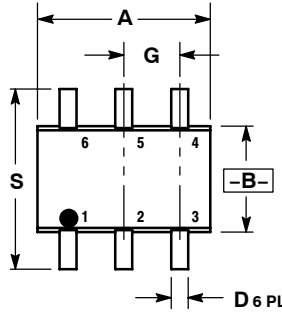
# NUP2301MW6T1

## PACKAGE DIMENSIONS

SC-88/SC70-6/SOT-363

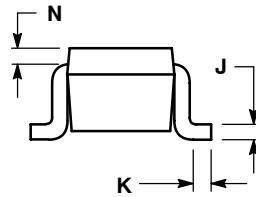
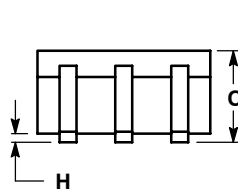
CASE 419B-02

ISSUE 02U



D 6 PL

$\oplus$	0.2 (0.008)	M	B	M
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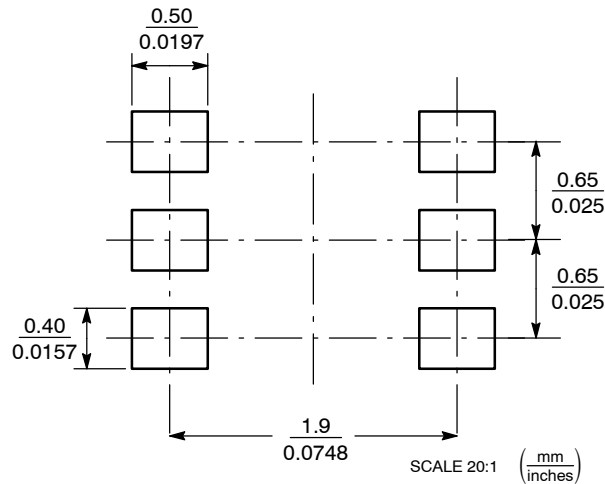


### NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. 419B-01 OBSOLETE, NEW STANDARD 419B-02.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.031	0.043	0.80	1.10
D	0.004	0.012	0.10	0.30
G	0.026 BSC		0.65 BSC	
H	---	0.004	---	0.10
J	0.004	0.010	0.10	0.25
K	0.004	0.012	0.10	0.30
N	0.008 REF		0.20 REF	
S	0.079	0.087	2.00	2.20


## SOLDERING FOOTPRINT\*



\*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

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