

Features

- Qualified to MIL-PRF-19500/444
- Available in JAN, JANTX, JANTXV and JANS
- Low Reverse Leakage
- Ideal For Space, Military, & Other High Reliability Applications
- ESD Sensitive to Class 1C



Electrical Characteristics (T_A = +25°C unless otherwise specified)

Parameter	Test Conditions	Symbol	Units	Min.	Max.
Reverse Breakdown Voltage	I _R = 10 μA dc	V _{(BR)1}	V dc	70	—
Reverse Breakdown Voltage	T _A = -55°C I _R = 10 μA dc	V _{(BR)2}	V dc	70	—
Forward Voltage	I _F = 1 mA dc	V _{F1}	V dc	—	0.410
Forward Voltage	I _F = 15 mA dc	V _{F2}	V dc	—	1.0
Forward Voltage	T _A = -55°C I _F = 1 mA dc	V _{F3}	V dc	—	.550
Forward Voltage	T _A = -55°C I _F = 15 mA dc	V _{F4}	V dc	—	1.0
Reverse Current	V _R = 50 V dc	I _{R1}	nA dc	—	200
Reverse Current	T _A = +150°C V _R = 50 V dc	I _{R2}	μA dc	—	200
Capacitance	V _R = 0, f = 1 MHz, V _{sig} = 50 mV (pk)	C	pF	—	2.0
Effective Carrier Lifetime	(See DESC Drawing C68001)	t _{CL}	ps		100

Absolute Maximum Ratings ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Ratings	Symbol	Value
Working Voltage	V_{RWM}	50 V (pk)
Reverse Current	I_{O1}	33 mA dc ⁽²⁾
Reverse Current ⁽¹⁾	I_{O2}	5 mA dc
Operating & Storage Temperature Range	T_J, T_{STG}	-65°C to $+150^\circ\text{C}$

Notes:

- (1) Maximum IO rating to ensure t_{CL} compliance (< 100 ps)
- (2) At $T_{SP} = +140^\circ\text{C}$, derate I_O to 0 at $+150^\circ\text{C}$.

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

Characteristics	Symbol	Max. Value
Thermal Resistance, Junction to Solder Pad	$R_{\theta JSP}$	170°C/W

Mechanical And Packaging Information

Case: Ceramic

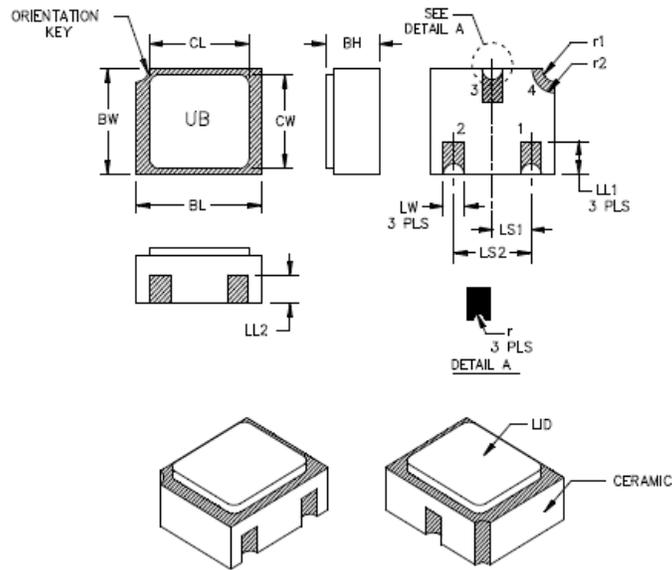
Terminals: Gold plating over nickel

Marking: Laser scribed; part number, date code, manufacturers ID. JANS devices include serial number

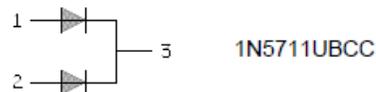
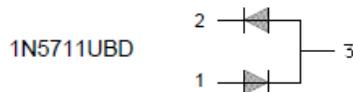
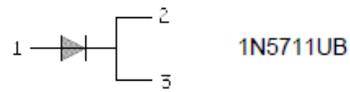
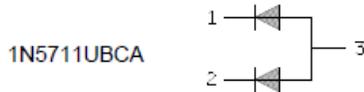
Weight: Approximately 4 grams

Tape and Reel Option Available: Contact factory

Outline Drawing (UB)



Symbol	Dimensions				Symbol	Dimensions			
	Inches		Millimeters			Inches		Millimeters	
	Min	Max	Min	Max		Min	Max	Min	Max
BH	.046	.056	1.17	1.42	LS ₁	.035	.040	0.89	1.02
BL	.115	.128	2.92	3.25	LS ₂	.071	.079	1.81	2.01
BW	.085	.108	2.16	2.74	LW	.016	.024	0.41	0.61
CL		.128		3.25	r		.008		0.20
CW		.108		2.74	r1		.012		0.31
LL1	.022	.038	0.56	0.96	r2		.022		0.56
LL2	.017	.035	0.43	0.89					



NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Hatched areas on package denote metallized areas.
4. Pad 4 = Shielding connected to the lid.
5. In accordance with ASME Y14.5M, diameters are equivalent to ϕx symbology.

Graphs

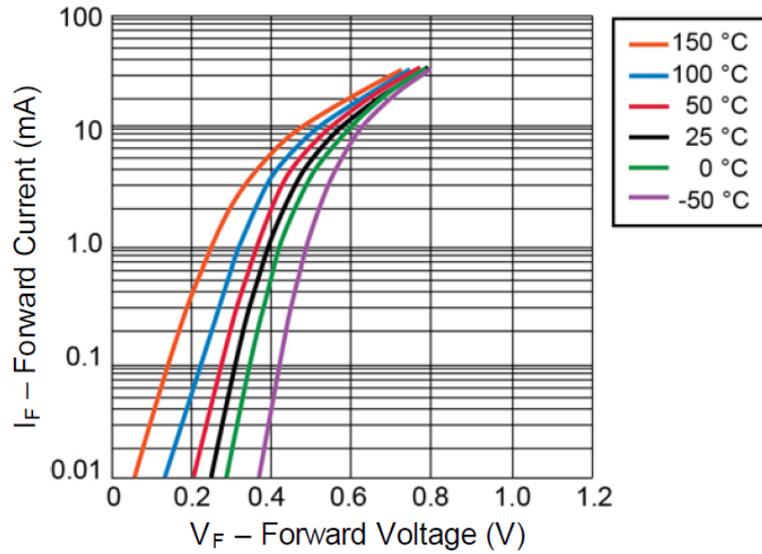


FIGURE 1
I-V Curve showing typical Forward Voltage Variation

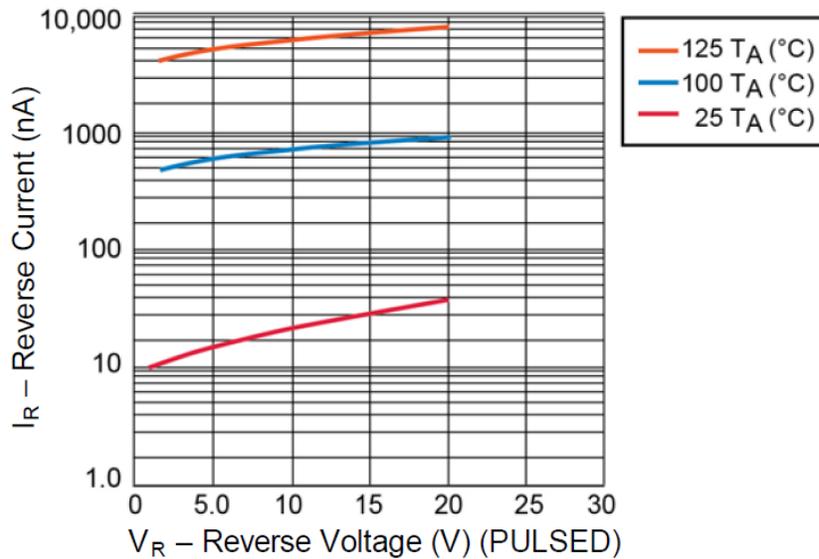


FIGURE 2

Graphs

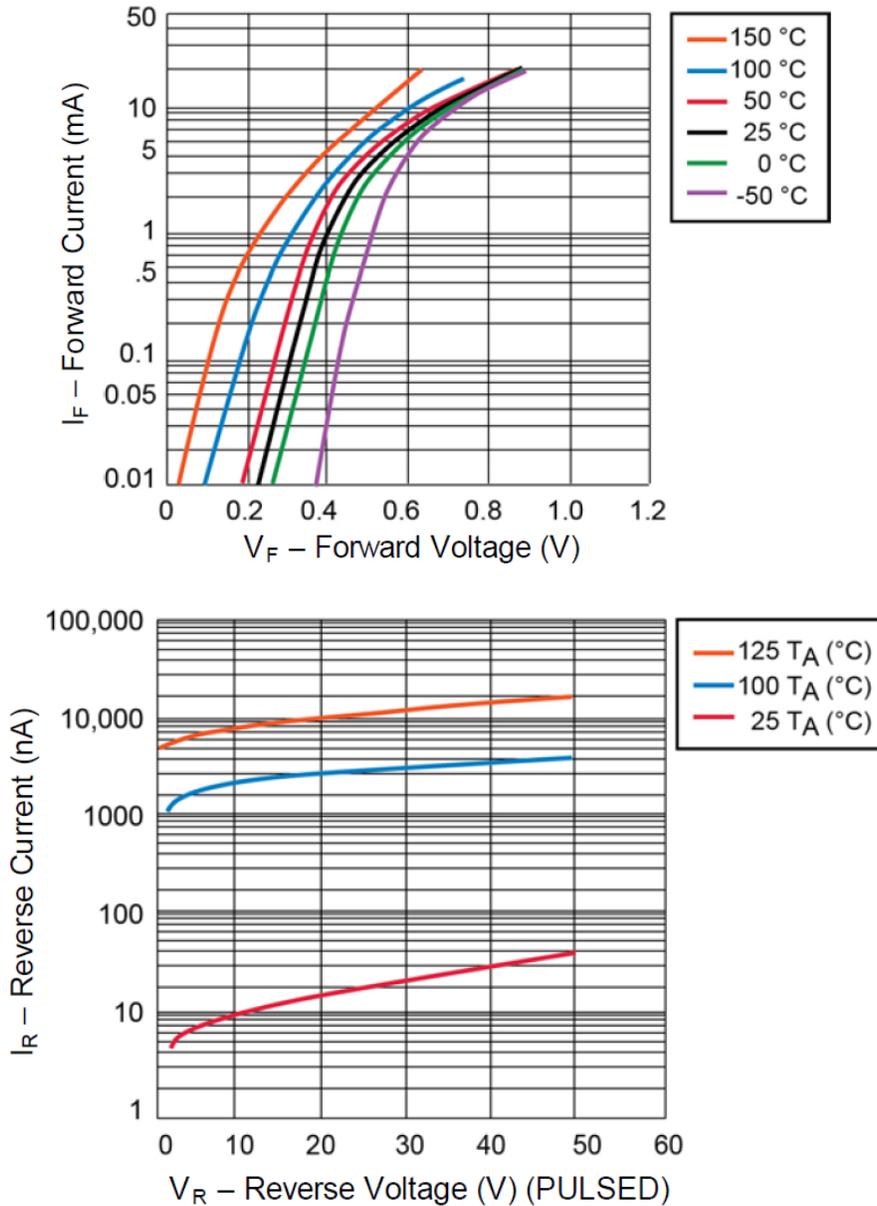


FIGURE 4
1N5711 Typical Variation of Reverse Current (I_R) vs Reverse Voltage (V_R)
at Various Temperatures

VPT COMPONENTS. ALL RIGHTS RESERVED.

Information in this document is provided in connection with VPT Components products. These materials are provided by VPT Components as a service to its customers and may be used for informational purposes only. Except as provided in VPT Components Terms and Conditions of Sale for such products or in any separate agreement related to this document, VPT Components assumes no liability whatsoever. VPT Components assumes no responsibility for errors or omissions in these materials. VPT Components may make changes to specifications and product descriptions at any time, without notice. VPT Components makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF VPT COMPONENTS PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. VPT COMPONENTS FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. VPT COMPONENTS SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

VPT Components products are not intended for use in medical, lifesaving or life sustaining applications. VPT Components customers using or selling VPT Components products for use in such applications do so at their own risk and agree to fully indemnify VPT Components for any damages resulting from such improper use or sale.