The documentation and process conversion measures necessary to comply with this document shall be completed by 14 September 2019.

INCH-POUND

MIL-PRF-19500/719D 14 June 2019 SUPERSEDING MIL-PRF-19500/719C 22 October 2013

### PERFORMANCE SPECIFICATION SHEET

\* SEMICONDUCTOR DEVICE, DIODE, SILICON, SCHOTTKY RECTIFIER, TYPES 1N6872, 1N6873, 1N6874, AND 1N6875, JANTX, JANTXV, AND JANS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-PRF-19500.

### 1. SCOPE

- \* 1.1 <u>Scope</u>. This specification covers the performance requirements for silicon, Schottky power surface mount rectifier diodes in a low profile package. Three levels of product assurance (JANTX, JANTXV, and JANS) are provided for each device type as specified in MIL-PRF-19500.
- \* 1.2 Package outline. The device package outline for this specification sheet is a UTK2 in accordance with figure 1.
  - 1.3 Maximum ratings. Unless otherwise specified  $T_C = +25^{\circ}C$ .

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Types	VRWM	I <sub>O</sub> T <sub>C</sub> = +100°C	IFSM $t_p = 8.3 \text{ ms},$ $T_C = +25^{\circ}\text{C}$	R <sub>θ</sub> JC (junction to cathode side)	R <sub>θ</sub> JC (junction to anode side)	T <sub>STG</sub> and T <sub>J</sub>
	V dc	A dc	A (pk)	°C/W	°C/W	°C
1N6872UTK2, AS, CS	45	25	400	.85	.95	-65 to +175
1N6873UTK2, AS, CS	60	25	400	.85	.95	-65 to +175
1N6874UTK2, AS, CS	80	25	400	.85	.95	-65 to +175
1N6875UTK2, AS, CS	100	25	400	.85	.95	-65 to +175

Comments, suggestions, or questions on this document should be addressed to DLA Land and Maritime, ATTN: VAC, P.O. Box 3990, Columbus, OH 43218-3990, or mailed to Semiconductor@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at https://assist.dla.mil



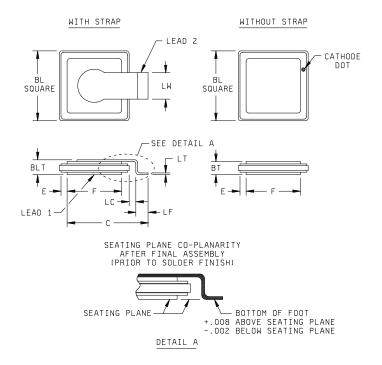
1.4 Primary electrical characteristics. Unless otherwise specified, T<sub>C</sub> = +25°C.

Column 1	Colur	nn 2	Colu	mn 3	Colu	Column 5	
Types	Vdc a	forward ge at ·25°C	forward TC = +	Maximum ward voltage TC = +125°C  Vda et I=  Maximum reverse current (see column 2)  Max jun capac f = 2		C <sub>J</sub> Maximum junction capacitance f = 1MHz V <sub>R</sub> = 5 VDC	
	10A	25A	10A	25A	T <sub>J</sub> = +25°C   T <sub>J</sub> = +125°C		pF
1N6872UTK2, AS, CS	.64	.77		.66	.5 7.0		850
1N6873UTK2, AS, CS	.68	.81		.70	.5 7.0		800
1N6874UTK2, AS, CS	.73	.88		.74	.5 7.0		750
1N6875UTK2, AS, CS	.75	.91	.63	.75	.5	7.0	600

- \* 1.5 <u>Part or Identifying Number (PIN)</u>. The PIN is in accordance with MIL-PRF-19500, and as specified herein. See 6.4 for PIN construction example and 6.5 for a list of available PINs.
- \* 1.5.1 <u>JAN certification mark and quality level for encapsulated devices</u>. The quality level designators for encapsulated devices that are applicable for this specification sheet from the lowest to the highest level are as follows: "JANTX", "JANTXV" and "JANS".
- \* 1.5.2 <u>Device type</u>. The designation system for the device types of semiconductors covered by this specification sheet are as follows.
- \* 1.5.2.1 <u>First number and first letter symbols</u>. The semiconductors of this specification sheet use the first number and letter symbols "1N".
- \* 1.5.2.2 <u>Second number symbols</u>. The second number symbols for the semiconductors covered by this specification sheet are as follows: "6872", "6873", "6874", and "6875".
- \* 1.5.3 <u>Suffix symbols</u>. The following suffix symbols are incorporated in the PIN as applicable.

UTK2	Indicates a device package with no strap (see figure 1).
UTK2AS	Indicates a device package with a strap that connects to the anode (see figure 1).
UTK2CS	Indicates a device package with a strap that connects to the cathode (see figure 1).

\* 1.5.4 Lead finish. The lead finishes applicable to this specification sheet are listed on QPDSIS-19500.



	Dimensions					
Ltr	Inc	hes	Millimeters			
	Min	Max	Min	Max		
BL	.230	.250	5.84	6.35		
BLT		.125		3.18		
BT		.115		2.92		
С	.293	.333	7.44	8.46		
E	.023	NOM	.58 NOM			
F	.171	.181	4.34	4.60		
LC	.040	NOM	1.02 NOM			
LF	.055	.075	1.40	1.91		
LT	.005	.015	.127	.381		
LW	.085	.115	2.16	2.92		

# NOTES:

- 1. Dimensions are in inches.
- 2. Millimeters are given for general information only.
- 3. In accordance with ASME Y14.5M, diameters are equivalent to φx symbology.
- 4. For anode, cathode, and strap connections, see 3.4.1 and 3.4.3.

FIGURE 1. <u>Dimensions and configuration</u>.

### 2. APPLICABLE DOCUMENTS

\* 2.1 <u>General</u>. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3 and 4 of this specification, whether or not they are listed.

## 2.2 Government documents.

2.2.1 <u>Specifications, standards, and handbooks</u>. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contact.

## DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-PRF-19500 - Semiconductor Devices, General Specification for.

#### DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-750 - Test Methods for Semiconductor Devices.

- \* (Copies of these documents are available online at https://quicksearch.dla.mil.)
- 2.3 <u>Order of precedence</u>. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.
  - 3. REQUIREMENTS
  - 3.1 General. The individual item requirements shall be as specified in MIL-PRF-19500 and as modified herein.
- 3.2 <u>Qualification</u>. Devices furnished under this specification shall be products that are manufactured by a manufacturer authorized by the qualifying activity for listing on the applicable qualified manufacturer's list (QML) before contract award (see 4.2 and 6.3).
- 3.3 <u>Abbreviations, symbols, and definitions</u>. Abbreviations, symbols, and definitions used herein shall be as specified in MIL-PRF-19500.
- 3.4 <u>Interface and physical dimensions</u>. The interface and physical dimensions shall be as specified in <u>MIL-PRF-19500</u>, and on figure 1 herein.
- 3.4.1 <u>Diode construction</u>. These devices shall be constructed utilizing double plug construction with eutectic bonding between both sides of the silicon die and terminal pins (see MIL-PRF-19500). Metallurgical bond shall be in accordance with the requirements of category II in MIL-PRF-19500. The diode body is ceramic. All seals are eutectic solder. Strap material is a copper alloy or copper sandwich. The 1N6872UTK2, 1N6873UTK2, 1N6873UTK2, and 1N6875UTK2 have no strap. The strap connects to the anode on 1N6872UTK2AS, 1N6873UTK2AS, 1N6873UTK2AS, and 1N6875UTK2AS, and 1N6875UTK2AS, and 1N6875UTK2CS, and 1N6875UTK2CS.

- 3.4.2 <u>Lead formation and finish</u>. Unless otherwise specified, lead finish (pads, bottom pad and strap foot) shall be solderable in accordance with MIL-PRF-19500, MIL-STD-750 and herein. Where a choice of lead finish or formation is desired, it shall be specified in the acquisition document (see 6.2).
- 3.4.3 <u>Polarity</u>. Polarity shall be marked with the appropriate diode symbol on the strap or with a dot on the cathode side of the seal ring on "no strap" devices (see figure 1).
- 3.5 <u>Marking</u>. Marking shall be in accordance with <u>MIL-PRF-19500</u> and herein. All marking may be omitted from the device except for the polarity marking. When present, part number may be abbreviated (ex: JS6872 for JANS1N6872UTK2). All marking that is omitted from the body of the device shall appear on the label of the initial container.
- 3.6 <u>Electrical performance characteristics</u>. Unless otherwise specified herein, the electrical performance characteristics are as specified in 1.3, 1.4 and table I.
  - 3.7 Electrical test requirements. The electrical test requirements shall be the subgroups specified in table I herein.
- 3.8 <u>Workmanship</u>. Semiconductor devices shall be processed in such a manner as to be uniform in quality and shall be free from other defects that will affect life, serviceability, or appearance.
  - 4. VERIFICATION
  - 4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:
    - a. Qualification inspection (see 4.2).
    - b. Screening (see 4.3).
    - c. Conformance inspection (see 4.4 and table I, table II, and table III).
- 4.2 Qualification inspection. Qualification inspection shall be in accordance with MIL-PRF-19500 and as specified herein.
- 4.2.1 <u>Construction verification</u>. Cross sectional photos from three devices shall be submitted in the qualification report.
- 4.2.2 <u>Group E qualification</u>. Group E qualification shall be performed herein for qualification or requalification only. In case qualification was awarded to a prior revision of the specification sheet that did not request the performance of table II tests, the tests specified in table II herein shall be performed on the first inspection lot to this revision to maintain qualification.

\* 4.3 <u>Screening</u>. Screening shall be in accordance with table IV of MIL-PRF-19500, and as specified herein. The following measurements shall be made in accordance with table I herein. Devices that exceed the limits of table I herein shall not be acceptable.

Screen	Measui	rement		
	JANS level	JANTX and JANTXV levels		
(1) 2h	Condition A, one pulse, IO = 0, VRWM = 0,	Condition A, one pulse, IO = 0, VRWM = 0,		
(1) 3b	IFSM = see 1.3, column 4 herein.	I <sub>FSM</sub> = see 1.3, column 4 herein.		
3c	Thermal impedance (see 4.3.1)	Thermal impedance (see 4.3.1)		
4	Not applicable	Not applicable		
5	Not applicable	Not applicable		
7b	Optional	Optional		
8	Serialization required.	Not applicable		
9	Not applicable	Not applicable		
10	Not applicable	Not applicable		
11	V <sub>F1</sub> and I <sub>R1</sub>	V <sub>F1</sub> and I <sub>R1</sub>		
	Method 1038 of MIL-STD-750, test condition A;	Method 1038 of MIL-STD-750, test condition A;		
	T <sub>C</sub> =150°C, t = 240 hours, V <sub>RM</sub> = 80 percent	$T_C = 150$ °C, t = 48 hours, $V_{RM} = 80$ percent of		
	of rated VRWM = see 1.3, column 2 herein	rated V <sub>RWM</sub> = see 1.3, column 2 herein V (pk),		
12	V (pk), IO = 0, f = 60 Hz; alternate test:	$I_O = 0$ , $f = 60$ Hz; alternate test: $V_{RM} = 80$		
	V <sub>RM</sub> = 80 percent of rated V <sub>RWM</sub> (see 1.3,	percent of rated VRWM (see 1.3, column 2		
	column 2 herein for V <sub>RWM</sub> ), T <sub>C</sub> =150°C	herein for V <sub>RWM</sub> ), T <sub>C</sub> =150°C		
	Subgroup 2, of table I herein, and subgroup 3	Subgroup 2, of table I herein excluding		
	of table I herein, V <sub>F1</sub> and I <sub>R1</sub> ;	thermal impedance; V <sub>F1</sub> and I <sub>R1</sub> ;		
13	$\Delta V_{F1} = \pm 50 \text{ mV (pk)};$	$\Delta V_{F1} = \pm 50 \text{ mV (pk)};$		
	$\Delta I_{R1} = \pm .1$ mA dc or 100 percent from the	$\Delta$ IR1 = ±.1 mA dc or 100 percent from the		
	initial value, whichever is greater. Scope	initial value, whichever is greater. Scope		
	display evaluation (see table I, subgroup 7)	display evaluation (see table I, subgroup 7)		
14b	Required	Required		
15	Not applicable	Not applicable		

- (1) Surge shall precede thermal impedance. These tests shall be performed anytime after screen 3 and before screen 10.
- \* 4.3.1 <u>Thermal impedance</u>. The thermal impedance measurements shall be performed in accordance with method 3101 of <u>MIL-STD-750</u> using the guidelines in that method for determining I<sub>M</sub>, I<sub>H</sub>, t<sub>H</sub>, t<sub>MD</sub>, t<sub>SW</sub>. See table E-IX, group E, subgroup 4 of <u>MIL-PRF-19500</u>.
  - 4.4 Conformance inspection. Conformance inspection shall be in accordance with MIL-PRF-19500.
- 4.4.1 <u>Group A inspection</u>. Group A inspection shall be conducted in accordance with table E-V of MIL-PRF-19500 and table I herein.
- \* 4.4.2 <u>Group B inspection</u>. Group B inspection shall be conducted in accordance with the conditions specified for subgroup testing in tables E-VIA (JANS) and E-VIB (JANTX and JANTXV) of MIL-PRF-19500 and 4.4.2.1 and 4.4.2.2 herein. Delta measurements shall be in accordance with table III herein.

\* 4.4.2.1 Group B inspection, table E-VIA (JANS) of MIL-PRF-19500.

	Subgroup	Method	Condition
*	B4	1037	$\Delta T_J$ = +85°C minimum, I <sub>F</sub> = 2 A minimum.
	B5	1038	Condition B, IF = 1 A dc minimum, adjust $T_A$ and IF to achieve $T_J$ = +175°C, +0°C, -35°C, t = 240 hours min; (heat sinking allowed).

\* 4.4.2.2 Group B inspection, table E-VIB (JANTX, and JANTXV) of MIL-PRF-19500.

<u>Subgroup</u>	<u>Method</u>	Condition
В3	1037	$\Delta T_J$ = +85°C minimum, IF = 2 A minimum.

\* 4.4.3 <u>Group C inspection</u>. Group C inspection shall be conducted in accordance with the conditions specified for subgroup testing in table E-VII of MIL-PRF-19500. Delta measurements shall be in accordance with table III herein.

	Subgroup	Method	Condition
	C5	3101	$I_{\hbox{\scriptsize H}}$ = 20 A to 50 A, $I_{\hbox{\scriptsize M}}$ = 10 mA to 250 mA, $t_{\hbox{\scriptsize H}}$ = thermal equilibrium; $t_{\hbox{\scriptsize MD}}$ = 200 $\mu sec$ maximum.
*	C6	1037	$\Delta T_J$ = +85°C minimum, I <sub>F</sub> = 2 A minimum.

- \* 4.4.4 <u>Group E inspection</u>. Group E inspection shall be conducted in accordance with the conditions specified for subgroup testing in table E-IX of MIL-PRF-19500 and table II herein. Delta measurements shall be in accordance with table III herein.
  - 4.5 Methods of inspection. Methods of inspection shall be as specified in the appropriate tables as follows.
  - 4.5.1 Pulse measurements. Conditions for pulse measurement shall be as specified in section 4 of MIL-STD-750.
- 4.5.2 Avalanche energy test. The Schottky rectifier shall be capable of absorbing the reverse energy of 350 rectangular pulses,  $t_p$  =1  $\mu$ sec,  $I_R$  = 2 A at 1 kHz. This will be performed during wafer or die level prior to device assembly.

# \* TABLE I. Group A inspection.

Inspection 1/		MIL-STD-750	Symbol	Lin	nits	Unit
Inspection 1/	Method	Conditions	- Symbol	Min	Max	Unit
Subgroup 1						
Visual and mechanical examination	2071					
Subgroup 2						
Thermal impedance <u>2</u> /	3101	$I_M$ = 10 mA to 250 mA, $I_H$ = 50 A, $t_H$ = 2 ms, $t_{md}$ = 200 $\mu$ s maximum	$Z_{\theta}JX$			
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS					.62 .62 .62 .62	°C/W °C/W °C/W
Forward voltage	4011	Condition A, pulsed test (see 4.5.1) $t_p = 300 \mu s$	V <sub>F1</sub>			
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS		IF = 10 A (pk)			.64 .68 .73 .75	V V V
Forward voltage	4011	Condition A, pulsed test (see 4.5.1) $t_p = 300 \mu s$	VF2			
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS		IF = 25 A (pk)			.77 .81 .88 .91	V V V
Reverse current leakage	4016	DC method	I <sub>R1</sub>			
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS		V <sub>R</sub> = 45 V dc V <sub>R</sub> = 60 V dc V <sub>R</sub> = 80 V dc V <sub>R</sub> = 100 V dc			.5 .5 .5	mA mA mA
Breakdown voltage	4021	Pulsed test (see 4.5.1) t <sub>p</sub> = 35 ms	VBR1	l		
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS		I <sub>R</sub> = 1.0 mA (pk) I <sub>R</sub> = 1.0 mA (pk) I <sub>R</sub> = 1.0 mA (pk) I <sub>R</sub> = 1.0 mA (pk)		50 66 88 110		V V V

See footnotes at end of table.

\* TABLE I. <u>Group A inspection</u> – Continued.

Inapartian 1/		MIL-STD-750	Cumbal	Lin	nits	Unit
Inspection 1/	Method	Conditions	- Symbol	Min	Max	Offic
Subgroup 3 High temperature operation:		T <sub>C</sub> = +125°C				
Forward voltage	4011	Condition A, pulsed test (see 4.5.1) $t_p = 300 \mu s$	V <sub>F3</sub>			
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS		IF = 25 A (pk) IF = 25 A (pk) IF = 25 A (pk) IF = 25 A (pk)			.66 .70 .74 .75	V V V
1N6875UTK2, CS, AS		I <sub>F</sub> = 10 A (pk)	V <sub>F4</sub>		.63	V
Reverse current leakage	4016	DC method				
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS		V <sub>R</sub> = 45 V V <sub>R</sub> = 60 V V <sub>R</sub> = 80 V V <sub>R</sub> = 100 V	I <sub>R2</sub>		7.0 7.0 7.0 7.0	mA mA mA
Low temperature operation:		T <sub>C</sub> = -55°C				
Breakdown voltage	4021	Pulsed test (see 4.5.1) t <sub>p</sub> = 35 ms	V <sub>BR2</sub>			
1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS		I <sub>R</sub> = 1.0 mA (pk) I <sub>R</sub> = 1.0 mA (pk) I <sub>R</sub> = 1.0 mA (pk) I <sub>R</sub> = 1.0 mA (pk)		45 60 80 100		V V V

See footnotes at end of table.

# \* TABLE I. Group A inspection - Continued.

Increation 4/		MIL-STD-750	C) made al	Lin	nits	l lmit
Inspection 1/	Method	Conditions	Symbol	Min	Max	Unit
Subgroup 4						
Junction capacitance 1N6872UTK2, AS, CS 1N6873UTK2, AS, CS 1N6874UTK2, AS, CS 1N6875UTK2, AS, CS	4001	V <sub>R</sub> = 5 V dc, f = 1 MHz, V <sub>SIG</sub> = 50 mV (p-p)	CJ		850 800 750 600	pF pF pF pF
Subgroup 5						
Not applicable						
Subgroup 6						
Surge	4066	IFSM = see 1.3, column 4, ten surges of 8.3 ms each at 1 minute intervals Condition A: T <sub>C</sub> = 25°C				
Electrical measurements		See table I, subgroup 2 herein.				
Subgroup 7						
Scope display evaluation	4023	<u>3</u> /				
Electrical measurements		See table I, subgroup 2 herein				

 $<sup>\</sup>underline{1}'$  For sampling plan, see MIL-PRF-19500.  $\underline{2}'$  This test required for the following end-point measurements only:

Group B, subgroups 3, 4, and 5 (JANS).

Group B, subgroups 2 and 3 (JANTX and JANTXV).

Group C, subgroups 2 and 6.

Group E, subgroup 1.

<sup>3/</sup> The reverse breakdown characteristics shall be viewed on an oscilloscope with display calibration factors of 2 mA/division and 10 to 20 V/division. Reverse current over the knee shall be at least 10 mA. Each device may exhibit a slightly rounded characteristic and any discontinuity or dynamic instability of the trace shall be cause for rejection.

TABLE II. Group E inspection (all quality levels) for qualification and requalification only.

Inapartian		MIL-STD-750	Qualification	
Inspection	Method	nod Conditions		
Subgroup 1			n = 45, c = 0	
Thermal shock (liquid to liquid)	1056	Test condition A, 0°C to +100°C.		
Temperature cycling (air to air)	1051	Test condition G, 500 cycles.		
Hermetic seal	1071			
Electrical measurements		See table I, subgroup 2 and table III herein.		
Subgroup 2 Life test	1038	Condition A, $t = 1,000$ hours, $V_R = 80$ percent $V_{rated}$ (see 1.3, column 2 herein).	n = 45, c = 0	
Electrical measurements		See table I, subgroup 2 and table III herein.		
Subgroup 4				
Thermal impedance curves		See MIL-PRF-19500.		
Subgroup 5				
Not applicable				
Subgroup 7			n = 22, c = 0	
Forward surge	4066	IFSM = see 1.3, 110 percent of column 4; ten surges of 8.3 ms each at 1 minute intervals, condition A: $T_C = 25^{\circ}C$ .		
Electrical measurements		See table I, subgroup 2 except for thermal impedance.		

### \* TABLE III. Groups B, C, and E delta requirements. 1/ 2/ 3/ 4/ 5/

Step	Inspection <u>1</u> /	MIL-STD-750		C: made al	Limit		l lmi4
		Method	Conditions	Symbol	Min	Max	Unit
1.	Forward voltage	4011	Condition A	ΔVF1	±50 mV		
2.	Reverse current leakage	4016	DC method	∆lR1	±.1 mA or 100 percent of initial value whichever is greater.		

- 1/ The delta measurements for table E-VIA (JANS) of MIL-PRF-19500 are as follows: Subgroups 4 and 5, see table III herein, steps 1 and 2.
- 2/ The delta measurements for table E-VIB (JANTX and JANTXV) of MIL-PRF-19500 are as follows: Subgroup 3, see table III herein, steps 1 and 2.
- 3/ The delta measurements for table VII of MIL-PRF-19500 are as follows: Subgroup 6, see table III herein, steps 1 and 2.
- 4/ The delta measurements for table IX of MIL-PRF-19500 are as follows: Subgroups 1 and 2, see table III herein, steps 1 and 2.
- 5/ Devices which exceed the table I, limits for this test shall not be accepted.

### 5. PACKAGING

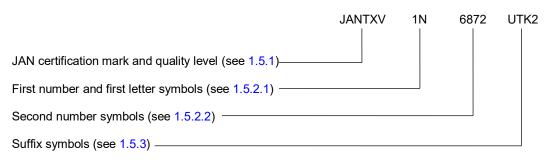
5.1 <u>Packaging</u>. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Service or Defense Agency, or within the Military Service's system commands. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

## 6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory. The notes specified in MIL-PRF-19500 are applicable to this specification.)

- 6.1 <u>Intended use</u>. Semiconductors conforming to this specification are intended for original equipment design applications and logistic support of existing equipment.
  - 6.2 Acquisition requirements. Acquisition documents should specify the following:
    - a. Title, number, and date of this specification.
    - b. Packaging requirements (see 5.1).
    - c. Lead formation and finish (see 3.4.2).
- \* d. The complete Part or Identifying Number (PIN), see title and section 1.

- 6.3 <u>Qualification</u>. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Manufacturers List (QML-19500) whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from DLA Land and Maritime, ATTN: /VQE, P.O. Box 3990, Columbus, OH 43218-3990 or e-mail vqe.chief@dla.mil. An online listing of products qualified to this specification may be found in the Qualified Products Database (QPD) at <a href="https://qpldocs.dla.mil">https://qpldocs.dla.mil</a>.
- \* 6.4 PIN construction example.
- \* 6.4.1 Encapsulated devices The PINs for encapsulated devices are constructed using the following form.



\* 6.5 List of PINs. The following is a list of possible PINs available on this specification sheet.

PINs for types 1N6872, 1N6873, 1N6874, and 1N6875.							
JANTX1N6872UTK2	JANTXV1N6872 TK2	JANS1N6872UTK2					
JANTX1N6873UTK2	JANTXV1N6873UTK2	JANS1N6873UTK2					
JANTX1N6874UTK2	JANTXV1N6874UTK2	JANS1N6874UTK2					
JANTX1N6875UTK2	JANTXV1N6875UTK2	JANS1N6875UTK2					
JANTX1N6872UTK2AS	JANTXV1N6872 TK2AS	JANS1N6872UTK2AS					
JANTX1N6873UTK2AS	JANTXV1N6873UTK2AS	JANS1N6873UTK2AS					
JANTX1N6874UTK2AS	JANTXV1N6874UTK2AS	JANS1N6874UTK2AS					
JANTX1N6875UTK2AS	JANTXV1N6875UTK2AS	JANS1N6875UTK2AS					
JANTX1N6872UTK2CS	JANTXV1N6872 TK2CS	JANS1N6872UTK2CS					
JANTX1N6873UTK2CS	JANTXV1N6873UTK2CS	JANS1N6873UTK2CS					
JANTX1N6874UTK2CS	JANTXV1N6874UTK2CS	JANS1N6874UTK2CS					
JANTX1N6875UTK2CS	JANTXV1N6875UTK2CS	JANS1N6875UTK2CS					

\* 6.6 <u>Changes from previous issue</u>. The margins of this specification are marked with asterisks to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Custodians:

Army - CR

Navy - EC

Air Force - 85

NASA - NA

DLA - CC

Preparing activity:

DLA - CC

(Project 5961-2019-026)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <a href="https://assist.dla.mil">https://assist.dla.mil</a>.