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TECHNICAL DATA SHEET

HIGH RELIABILITY SCHOTTKY RECTIFIER Qualified per MIL-PRF-19500/554

DEVICES

1N6392

LEVELS

**JAN
JANTX
JANTXV**

ABSOLUTE MAXIMUM RATINGS ($T_C = +25^{\circ}\text{C}$ unless otherwise noted) (Per Diode)

Parameters / Test Conditions	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RWM}	45	V
Working Peak Reverse Voltage	V_{RRM}	45	V
DC Blocking Voltage	V_R	45	V
Average Forward Current, 115°C	I_{FM}	60 Note 1	Apk
Peak Surge Forward Current @ $t_p = 8.3\text{ms}$, half sinewave, $I_o = 0$; $V_{RM} = 0$	I_{FSM}	1000	Apk
Thermal Resistance, Junction to Case	$R_{\theta jc}$	1.0	$^{\circ}\text{C/W}$
Operating Junction Temperature	T_j	-55°C to 175°C	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55°C to 175°C	$^{\circ}\text{C}$

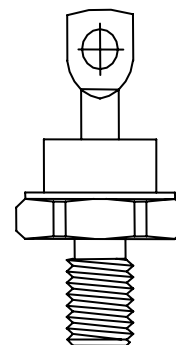
ELECTRICAL CHARACTERISTICS ($T_A = +25^{\circ}\text{C}$, unless otherwise noted) (Per Diode)

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Forward Voltage $I_F = 10\text{A}$, $T_j = 25^{\circ}\text{C}^*$ $I_F = 60\text{A}$, $T_j = 25^{\circ}\text{C}^*$ $I_F = 120\text{A}$, $T_j = 25^{\circ}\text{C}^*$ $I_F = 10\text{A}$, $T_j = -55^{\circ}\text{C}^*$	V_{FM}		0.51 0.68 0.82 0.69	V
Reverse Current $V_R = 45\text{V}$, $T_j = 25^{\circ}\text{C}$ $V_R = 45\text{V}$, $T_j = 125^{\circ}\text{C}$ $V_R = 45\text{V}$, $T_j = 175^{\circ}\text{C}$	I_{RM}		2.0 60 200	mA
Junction Capacitance $V_R = 5\text{V}$ $f = 1\text{MHz}$	C_j		3000	pF

* Pulse test: Pulse width 300 μsec , Duty cycle 2%

Note:

- Derate linearly @ $1.09\text{A}/^{\circ}\text{C}$ from $T_j = T_c$ $>115^{\circ}\text{C}$



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GRAPHS

FIGURE 1
TYPICAL FORWARD CHARACTERISTICS

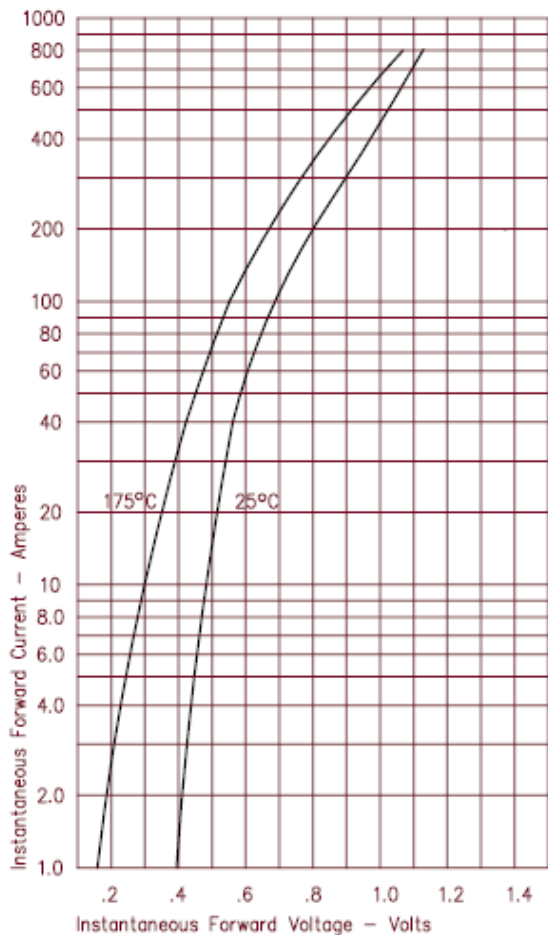


FIGURE 2
TYPICAL REVERSE CHARACTERISTICS

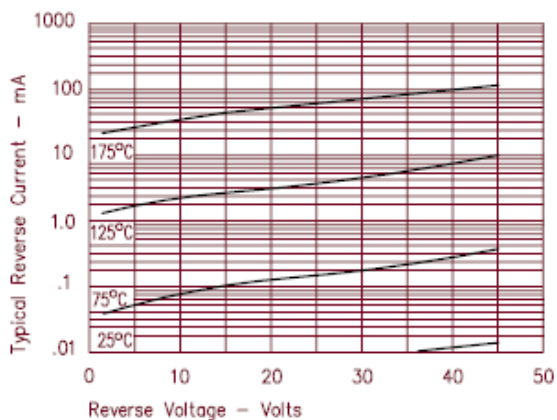


FIGURE 3
TYPICAL JUNCTION CAPACITANCE

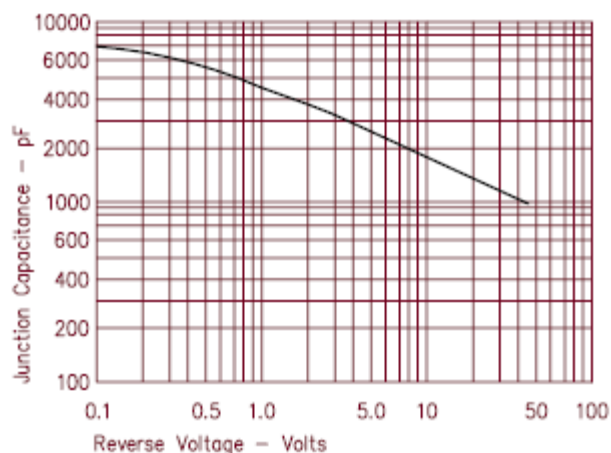
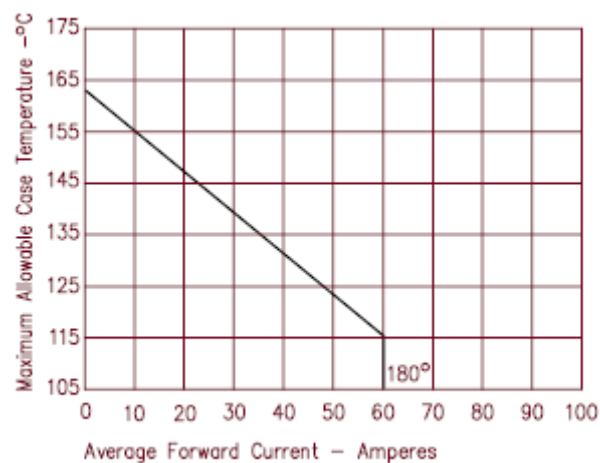


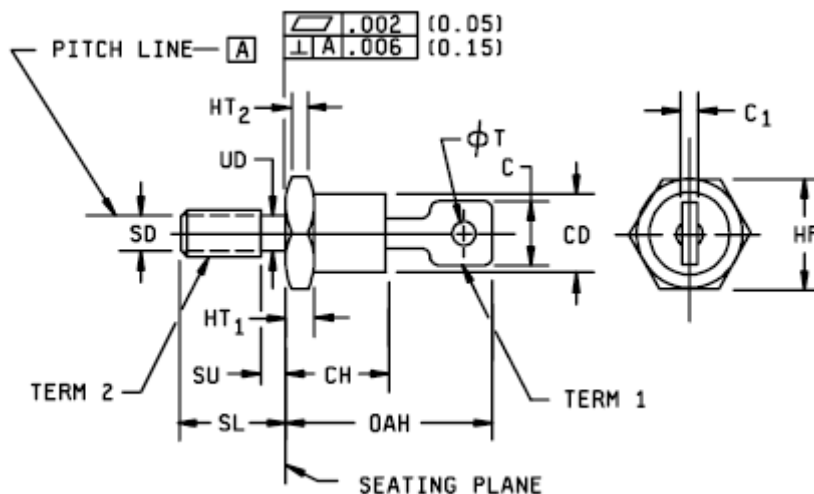
FIGURE 4
FORWARD CURRENT DERATING



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PACKAGE DIMENSIONS



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NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Units must not be damaged by torque of 30 inch-pound applied to .25-28 UNF-2B nut assembled on thread.
4. Length of incomplete or undercut threads of UD.
5. Maximum pitch diameter of plated threads shall be basic pitch diameter .2268 inch (5.76 mm) reference (FED-STD-H28, "Screw-Thread Standards for Federal Services").
6. A chamfer or undercut on one or both ends of the hex portion is optional; minimum base diameter at seating plane .600 inch (15.24 mm).
7. The angular orientation and peripheral configuration of terminal 1 is undefined, however, the major surfaces over dimensions C and C₁ shall be flat and the minimum cross-sectional area from the hole to any point on the periphery shall be .0025 in² (1.59 mm²).
8. In accordance with ASME Y14.5M, diameters are equivalent to ϕ x symbology.

Ltr	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
C		.375		9.52	7
C1	.025	.080	0.64	2.03	
CD		.667		16.94	
CH		.450		11.43	
HF	.669	.688	17.00	17.47	
HT1	.115	.200	2.93	5.08	
HT2	.060		1.53		6
OAH	.750	1.00	19.05	25.40	
SD					5
SL	.422	.453	10.72	11.50	
SU		.090		2.28	
UD	.220	.249	5.59	6.32	4
φT	.140	.175	3.56	4.44	