

STN6461 – STN6468
and
STN6461SMS – STN6468SMS

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

STN

Screening^{2/}
 — = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

Package
 — = Axial
 SMS = SMS

Voltage/Family
 6461 = 5.6 V
 6462 = 6.5 V
 6463 = 13.6 V
 6464 = 16.4 V
 6465 = 27.0 V
 6466 = 33.0 V
 6467 = 43.7 V
 6468 = 54.0 V

500 WATTS
PEAK PULSE POWER
5.6 – 54 VOLTS
UNI-DIRECTIONAL
TRANSIENT VOLTAGE SUPPRESSOR

FEATURES:

- 5.6 to 54 Volts Uni-Directional
- Bi-Directional Available – Consult Factory
- Hermetic Glass Diode
- 175°C Maximum Operating Temperature
- TX, TXV, and Space Level Screening Available - Consult Factory^{2/}
- Replacement for 1N6461 – 1N6468

APPLICATIONS:

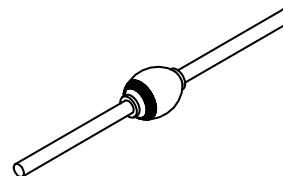
- Voltage Sensitive Component Protection
- Protection Against Power Surges
- Lightning Protection

MAXIMUM RATINGS	Symbol	Value	Unit
Stand Off Voltage	V_{RRM} V_{RSM} V_R	5.6 – 54.0	V
Steady State Power Dissipation	P_D	2.5	W
Peak Pulse Power @ 1.0 msec	P_{PP}	500	W
Forward Voltage @ 1 Amp	V_F	1.5	V
Operating and Storage Temperature	T_{op} & T_{stg}	-65 to +175	°C
Thermal Resistance Junction to Lead for Axial, L = 3/8" Junction to End Tab for Surface Mount	$R_{\theta JL}$ $R_{\theta JE}$	60 20	°C/W

NOTES:

- 1/ For ordering information, price, operating curves, and availability – contact factory.
 2/ Screening based on MIL-PRF-19500. Screening flows available on request.
 3/ 10/1000 μ s double exponential waveform, per R.E.A. and fig # 3.

AXIAL



SMS





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STN6461 – STN6468 and STN6461SMS – STN6468SMS

ELECTRICAL CHARACTERISTICS (Note 1)	Standoff Voltage	Maximum Reverse Leakage	Reverse Breakdown Voltage	Test Current	Max Clamping Voltage (V_{CL}) @ Peak Pulse Current (I_{PP}) (Note 3)		Maximum Temp. Coefficient of V_{BR}	Replacement JEDEC Part Numbers
PART NUMBER	V_{SO}	$I_R @ V_{SO}$	Voltage (V_{BR}) @ I_T Min	I_T	V_{CL}	I_{PP}	(% / °C)	
UNIPOLAR	V	μA	V	mA	V	A		
STN6461	5	3000	5.6	25	9.0	56	- 0.030 + 0.060	1N6461
STN6462	6	2500	6.5	20	11.0	46	0.060	1N6462
STN6463	12	500	13.6	5	22.6	22	0.085	1N6463
STN6464	15	500	16.4	5	26.5	19	0.085	1N6464
STN6465	24	50	27.0	2	41.4	12	0.096	1N6465
STN6466	30.5	3	33.0	1	47.5	11	0.098	1N6466
STN6467	40.3	2	43.7	1	63.5	8	0.101	1N6467
STN6468	51.6	2	54.0	1	78.5	6	0.103	1N6468

FIGURE 1

DIMENSIONS		
DIM	MIN	MAX
A	0.130"	0.165"
B	0.140"	0.160"
C	0.038"	0.042"
D	0.900"	---

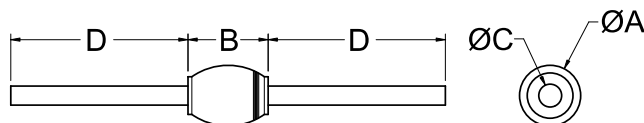


FIGURE 2

DIMENSIONS		
DIM	MIN	MAX
A	0.172"	0.180"
B	0.180"	0.235"
C	0.020"	0.028"
D	0.001"	---

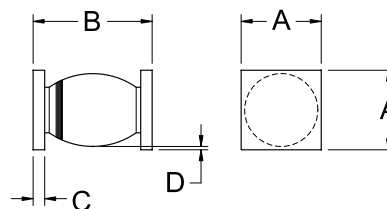


FIGURE 3 – Exponential 10 / 1000 μs Waveform

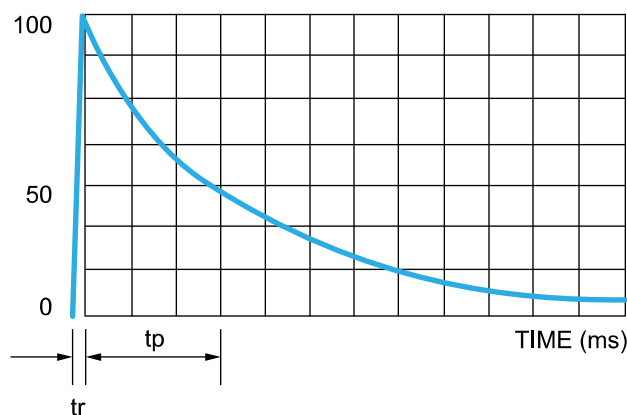
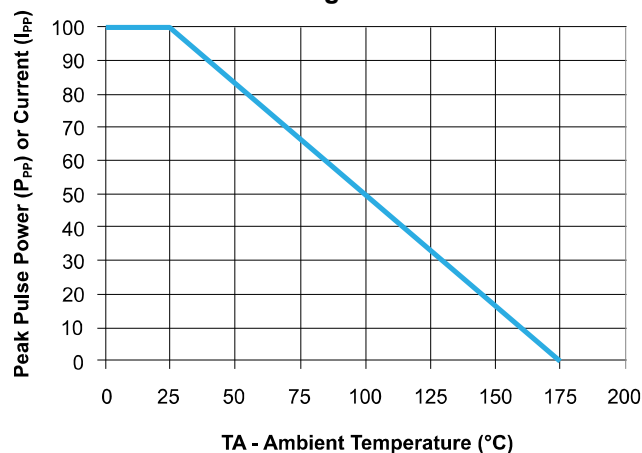


FIGURE 4 – Power Derating Curve



NOTE: All specifications are subject to change without notification.
SSD's for these devices should be reviewed by SSDI prior to release.

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