

TECHNICAL DATA
DATA SHEET 4081, REV D

AVAILABLE AS
JANS

JAN EQUIVALENT*

SJ66XX/US*

SX66XX/US*

SV66XX/US*

SS66XX/US*

Switching / Signal Diodes

Qualified per MIL-PRF-19500/578, /609

DESCRIPTION:

This metallurgically bonded switching/signal diode series is military qualified per MIL-PRF-19500/578, /609 and is targeted for space, commercial and military aircraft, military vehicles, shipboard markets and all high reliability applications.

FEATURES / BENEFITS:

- ✓ Ultra fast recovery time
- ✓ Metallurgically bonded
- ✓ Small size, high density
- ✓ Very low capacitance
- ✓ JANS available per MIL-PRF-19500/578, /609

MAXIMUM RATINGS

- ✓ Operating and Storage Temperature: -65°C to +175°C
- ✓ Thermal Resistance (junction to lead):
1N6638,42: 150 °C
1N6639,40,41: 160 °C
- ✓ Thermal Resistance (junction to endcap):
1N6638,42: 40 °C
1N6639,40,41: 50 °C

ELECTRICAL CHARACTERISTICS

TYPE NUMBER	WORKING PEAK REVERSE VOLTAGE	PEAK FORWARD SURGE CURRENT ¹	AVERAGE RECTIFIED FORWARD CURRENT	BREAKDOWN VOLTAGE
		I_{FSM} Amps	I_{AV} μAmps	
	Volts	55°C	75°C	V
1N6638/US	125	2.5	300	150
1N6639/US	75			100
1N6640/US	75			75
1N6641/US	75			75
1N6642/US	75			75

Note 1: 8.3ms surge, half sine wave

*Sensitron **space equivalent diodes** are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our internal specification.

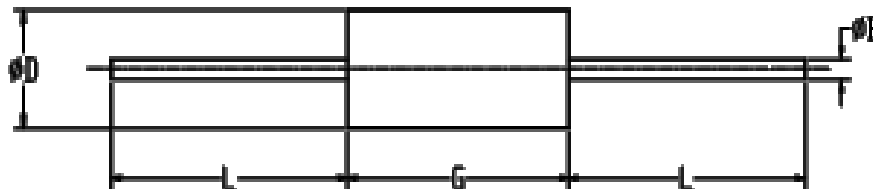
SENSITRON **SEMICONDUCTOR**

1N6638/US thru 1N6642/US

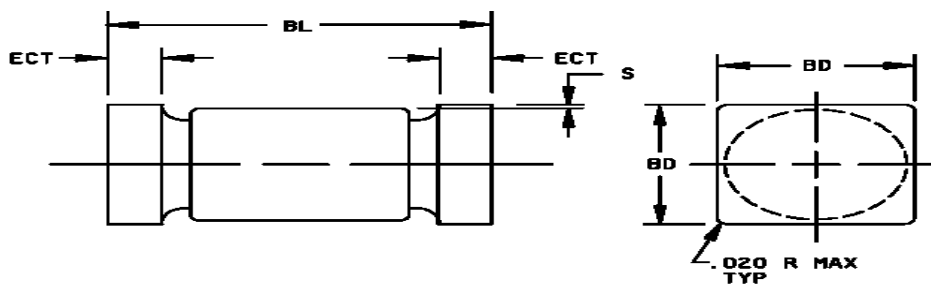
**SWITCHING / SIGNAL
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PACKAGE DIMENSIONS (inches/mm)



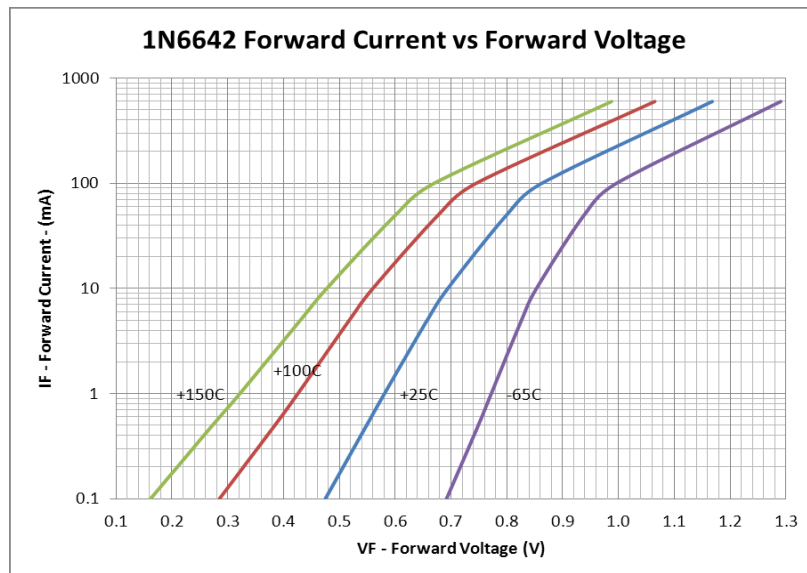
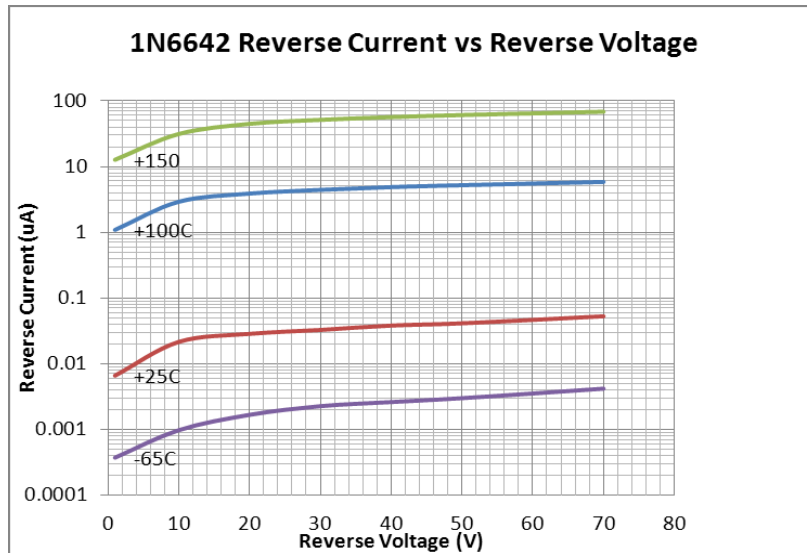
PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	ϕB	ϕD	G	L
DO-35	.018/.022 0.46/0.56	.056/.080 1.42/2.03	.130/.180 3.30/4.57	1.00/1.50 25.4/38.10



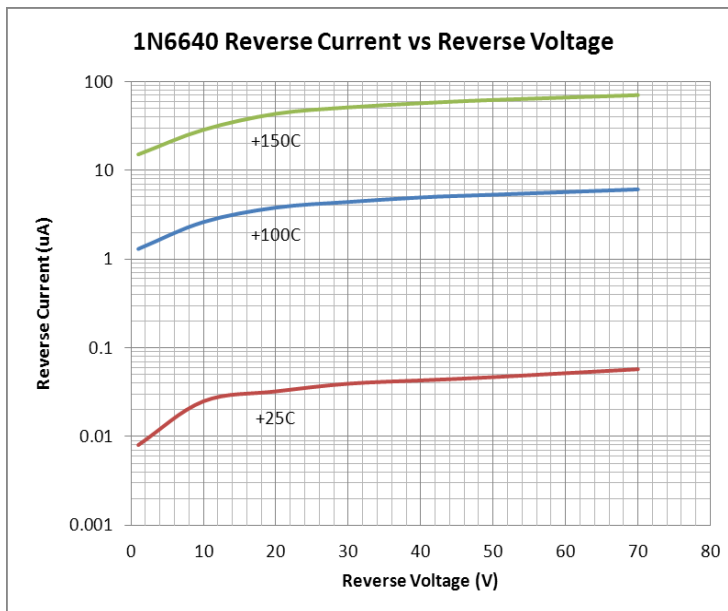
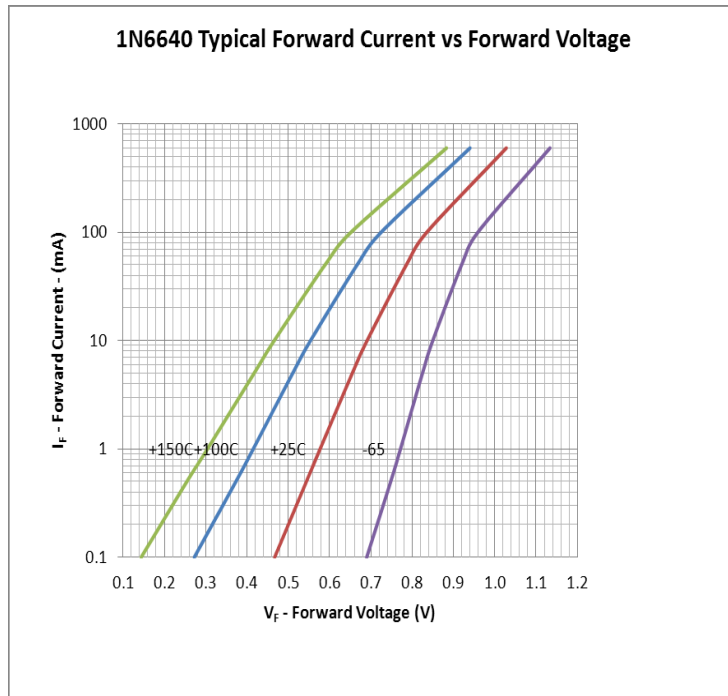
PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	BL	BD	S	ECT
D-5D	.165/.195 4.19/4.95	.070/.085 1.78/2.16	0.003 Min	.019/.028 0.48/0.71

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GRAPHS:



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SENSITRON **SEMICONDUCTOR**

1N6638/US thru 1N6642/US

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PART ORDERING INFORMATION

The following part numbers can be purchased in either axial or surface mount devices and screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

Sensitron Screening Level	*Part Number-- Leaded Package (example for 1N6638)	*Part Number-- Surface Mount Package (example for 1N6638US)
1N	1N6638	1N6638US
SJ	SJ6638	SJ6638US
SX	SX6638	SX6638US
SV	SV6638	SV6638US
JANS	JANS1N6638	JANS1N6638US
SS	SS6638	SS6638US

**Parts can also be ordered Tape & Reel*

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