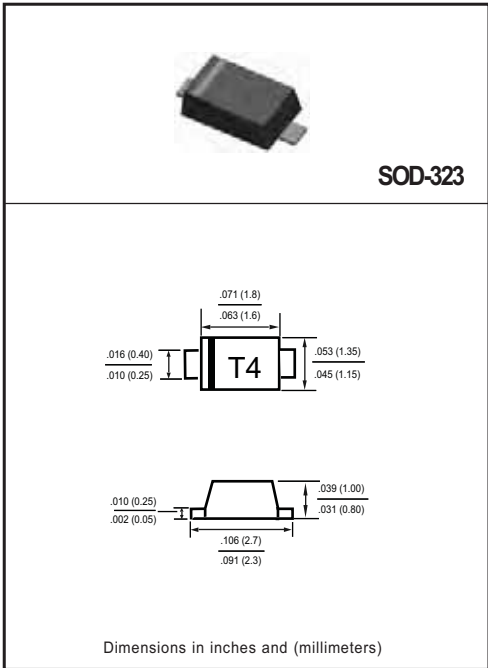


FAST SWITCHING DIODE
VOLTAGE 75 Volts CURRENT 150 mAmperes

FEATURES

- * Flat Lead SOD-323 Small Outline Plastic Package
- * Surface Device Type Mounting
- * Fast Switching Device (Trr<4.0nS)
- * Moisture Sensitivity Level 1
- * General Purpose Diodes
- * Clip Bonding Construction, Good Thermal Capability
- * Pb Free Version and ROHS Compliant
- * Matte Tin(Sn) Lead Finish with Nicke(Ni) Underplate
- * Band Indicates Cathode
- * P/N suffix V means AEC-Q101 qualified, e.g: 1N4148WSV
- * Halogen-free
- * Marking :T4



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Absolute Maximum Ratings (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	1N4148WS	UNITS
Non-Repetitive Peak Reverse Voltage	V _{RSM}	100	Volts
Repetitive Peak Reverse Voltage	V _{RRM}	75	Volts
Continuous Forward Current	I _O	150	mAmps
Repetitive Peak Forward Current	I _{FRM}	0.3	Amps
Power Dissipation	PD	200	mW
Operating Junction Temperature	T _J	-65 to + 150	°C
Storage Temperature Range	T _{STG}	-65 to + 150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	1N4148WS	UNITS
Forward Voltage @IF=10mA	V _F	1.0	Volts
Reverse Leakage Current @VR=20V @VR=75V	I _R	25 5	nAmps uAmps
Breakdown Voltage @IR=100uA @IR=5uA	V _R	100 75	Volts
Reverse Recovery Time (IF=10mA, IR=60mA, RL=100 Ω, IRR=1mA)	T _{rr}	4	nS
Capacitance (VR=0V, f=1MHz)	C	4	pF

Note: " RoHS Compliant".

RATING AND CHARACTERISTICS CURVES (1N4148WS)

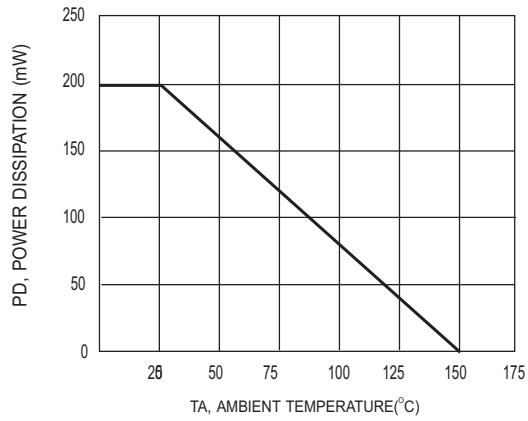


FIG.1 FORWARD DERATING CURVE

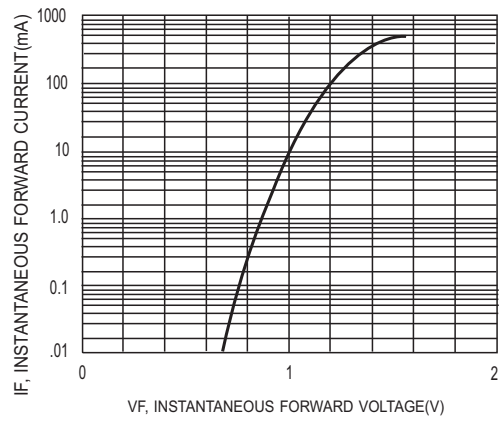


FIG.2 FORWARD CHARACTERISTICS

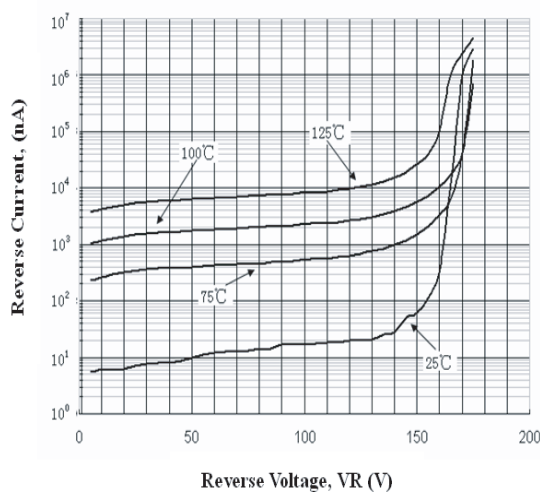


FIG.3 REVERSE CURRENT VS REVERSE VOLTAGE

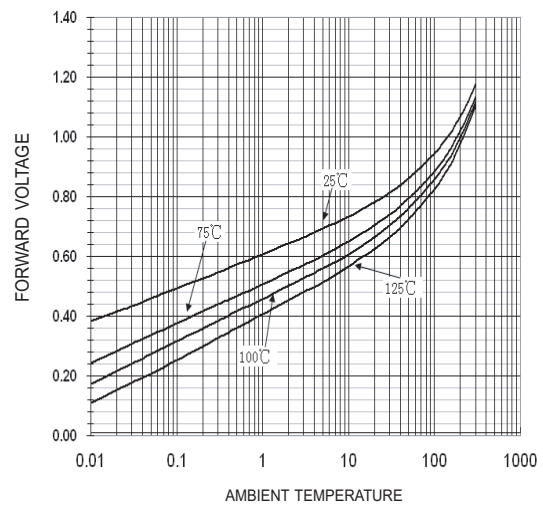
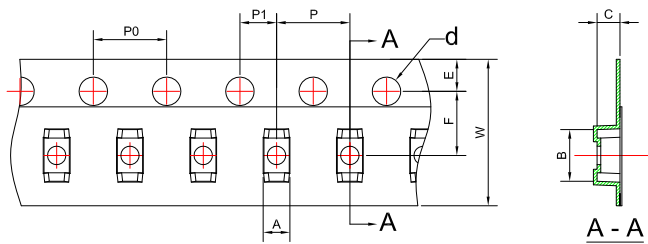


FIG.4 FORWARD VOLTAGE VS AMBIENT TEMPERATURE

SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

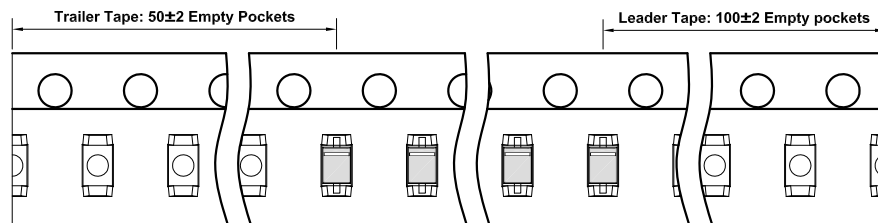


Packaging Description:

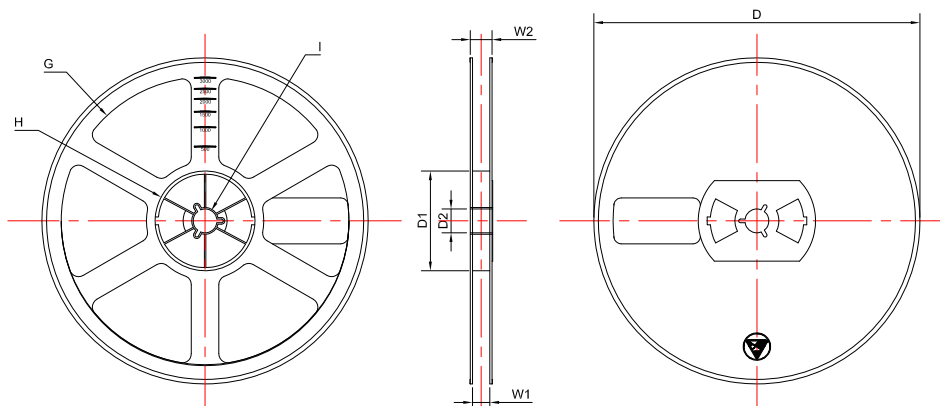
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. The reels are blue in color and made of recyclable plastic.

Dimensions are in millimeter										
Pkg Type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.46	2.90	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	±0.05	±0.05	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.3/-0.1

SOD-323 Tape Leader and Trailer



SOD-323 Reel



Unit: mm

Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	±2	±1	±1	±1	±1	±1	±1	±1

Packaging Quantity

Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
3,000	7 inch	45,000	210*208*203	180,000	440*440*230

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