

DO-35 Glass-Encapsulate Diodes

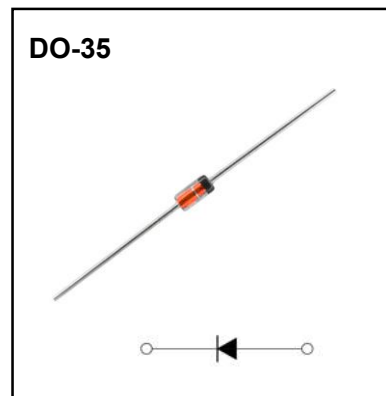
Small Signal Fast Switching Diodes

Features

- V_R 75V
- I_{FAV} 150mA

Applications

- Extreme fast switches



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Max
Repetitive peak reverse voltage	V_{RRM}	V		100
Reverse voltage	V_R	V		75
Peak forward surge current	I_{FSM}	A	$t_p=1\mu s$	2
Repetitive peak forward current	I_{FRM}	mA		500
Forward continuous current	I_F	mA		300
Average forward current	I_{FAV}	mA	$V_R=0$	150
Power dissipation	P_{tot}	mW	$L=4mm, T_L=45^\circ C$	440
			$L=4mm, T_L \leq 25^\circ C$	500
Thermal resistance	R_{thJA}	$^\circ C/W$	junction to ambient air, $L=4mm, T_L=constant$	350
Maximum junction temperature	T_j	$^\circ C$		175
Storage temperature range	T_{stg}	$^\circ C$		-65 to +175

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Item	Symbol	Unit	Conditions	Max
Forward voltage	V_F	mV	$I_F=200\text{mA}$	1000
Reverse current	I_R	nA	$V_R=20\text{V}$	25
	I_R	μA	$V_R=20\text{V}, T_J=150^{\circ}\text{C}$	50
	I_R	μA	$V_R=75\text{V}$	5
Breakdown voltage	$V_{(BR)}$	V	$I_R=100\mu\text{A}$, $t_p/T=0.01$, $t_p=0.3\text{ms}$	100(min)
Diode capacitance	C_D	pF	$V_R=0$, $f=1\text{MHz}$, $V_{HF}=50\text{mV}$	4
Reverse recovery time	t_{rr}	ns	$I_F=I_R=10\text{mA}$, $i_R=1\text{mA}$	8
	t_{rr}	ns	$I_F=10\text{mA}$, $V_R=6\text{V}$, $i_R=0.1\times I_R$, $R_L=100\Omega$	4

Typical Characteristics

FIG1: Forward Voltage vs. Junction Temperature

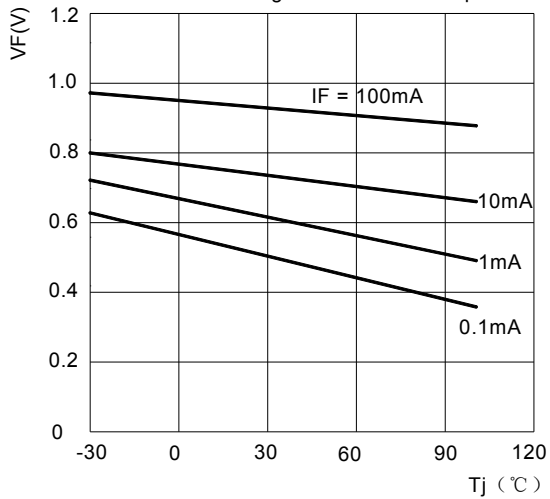


FIG2: Forward Current vs. Forward Voltage

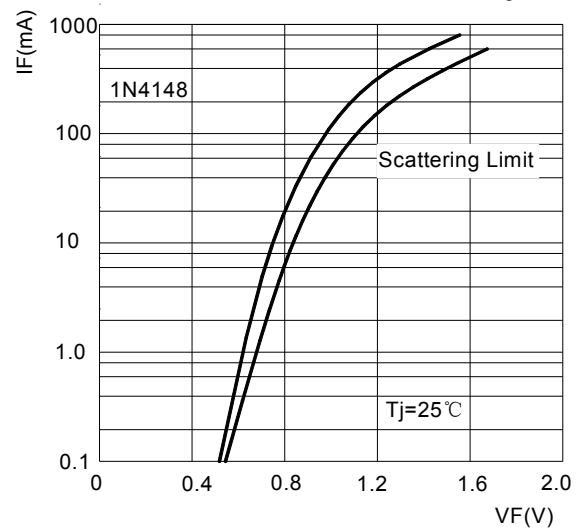
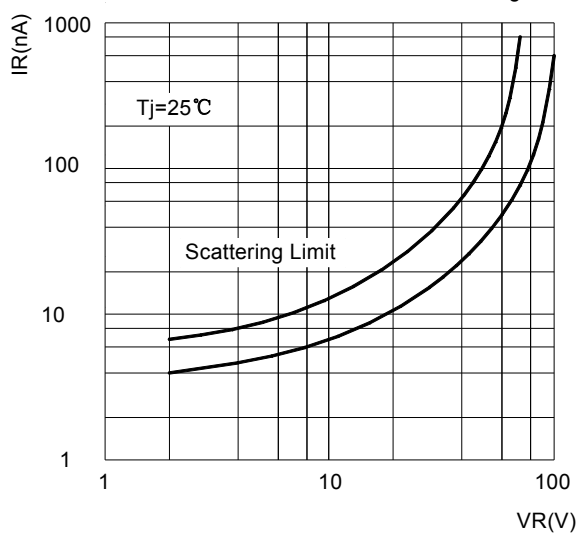
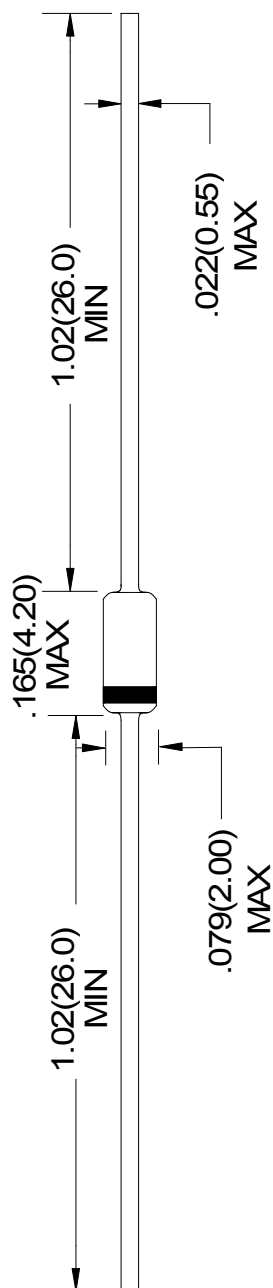


FIG3: Reverse Current vs. Reverse Voltage





Unit: in inches (millimeters)

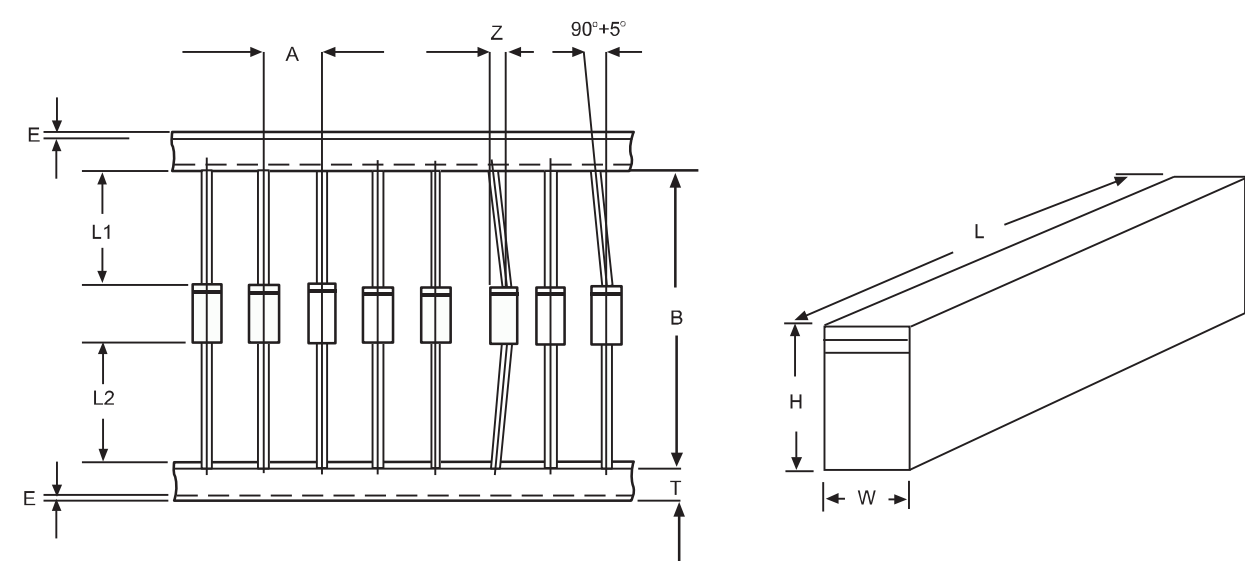
NOTICE

JSHD reserve the right to make modifications,enhancements, improvements, corrections or other changes without further notice to any product herein .JSHD does not assume any liability arising out of the application or use of any product described herein.

Ammo Box Packaging Specifications For Axial Lead Rectifiers

Axial lead devices are packed in accordance with EIA standard RS-296-D and specifications given below

COMPONENT OUTLINE	COMPONENT PITCH A	INNER TAPE PITCH B	CUMULATIVE PITCH TOLERANCE
	±0.5mm(.020``)	+0.5mm(.020``)	
R-1	5.0mm	26.0mm	2.0mm/20pitch
R-1	5.0mm	52.4mm	2.0mm/10pitch
A-405	5.0mm	26.0mm	2.0mm/20pitch
A-405	5.0mm	52.4mm	2.0mm/10pitch
DO-34/DO-35	5.0mm	26.0mm	2.0mm/20pitch
DO-34/DO-35	5.0mm	52.4mm	2.0mm/10pitch
DO-41	5.0mm	26.0mm	2.0mm/20pitch
DO-41	5.0mm	52.4mm	2.0mm/10pitch
DO-15	5.0mm	52.4mm	2.0mm/10pitch
DO-27	10.0mm	52.4mm	2.0mm/10pitch
R-6	10.0mm	52.4mm	2.0mm/10pitch



ITEM	SYMBOL	SPECIFICATIONS(mm)	SPECIFICATIONS(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	IL1-L2I	1.0max	0.040max
Box length	L	255.0±5.0	10.04±0.197
Box width	W	78.0±5.0	3.07±0.197
Box height	H	150.0±5.0	5.91±0.197

NOTE:Each component lead shall be sandwiched between tapes for A minimum of 3.2mm(0.126``)