

1N4148

SWITCHING DIODES

Voltage

100 V

Power

500 mW

DO-34

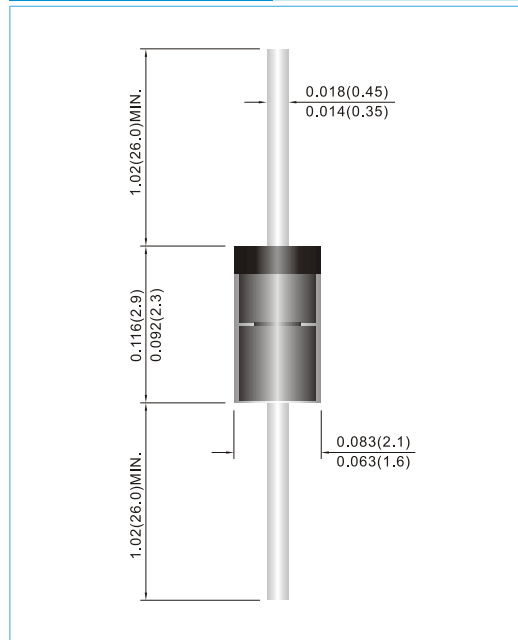
Unit : inch(mm)

Features

- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free).

Mechanical Data

- Case: Molded Glass DO-34
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.09 grams
- Packing information
 - B - 2K per Bulk box
 - T/R - 10K per 15" plastic Reel
 - T/B - 5K per horiz. tape & Ammo box



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

PARAMETER	SYMBOL	VALUE	UNIT
Peak Reverse Voltage	V_{RM}	100	V
Surge Forward Current at $t<1\text{s}$ and $T_J=25^{\circ}\text{C}$	I_{FSM}	500	mA
Power Dissipation at $T_A=25^{\circ}\text{C}$	P_{TOT}	500	mW
Forward Continuous current	I_F	300	mA
Maximum Forward Voltage at $I_F=10\text{mA}$	V_F	1	V
Maximum Leakage Current at $V_R=20\text{V}$ at $V_R=75\text{V}$ at $V_R=20\text{V}$, $T_J=150^{\circ}\text{C}$	I_R	25 5 50	nA μA μA
Maximum Capacitance at $V_F=V_R=0$	C_J	4	pF
Maximum Reverse Recovery Time From $I_F=-I_R=10\text{mA}$ to $I_{RR}=-1\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$	T_{RR}	4	ns
Typical Thermal Resistance	$R_{\theta JA}$	300	$^{\circ}\text{C/W}$
Junction Temperature And Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^{\circ}\text{C}$

Note : 1. C_J at $V_R=0, f=1\text{MHz}$

2. From $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$

1N4148

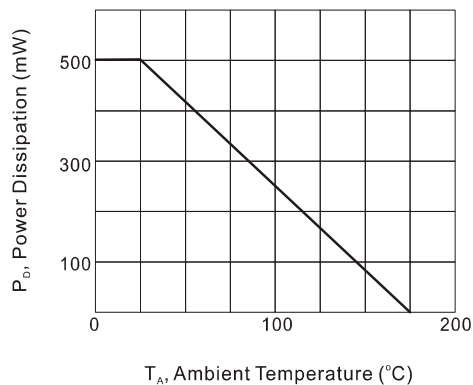


Fig.1 Derating Curve

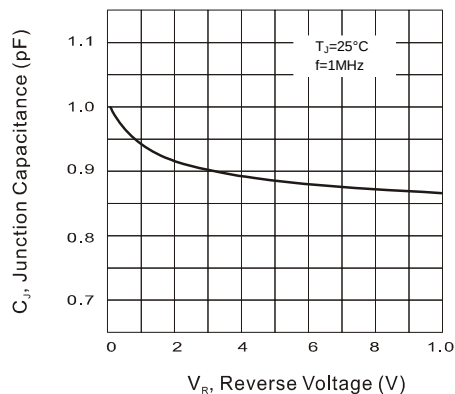


Fig.2 Typical Junction Capacitance

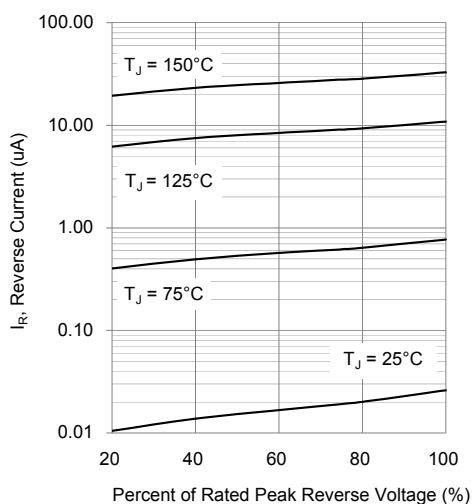


Fig.3 Typical Leakage Characteristics

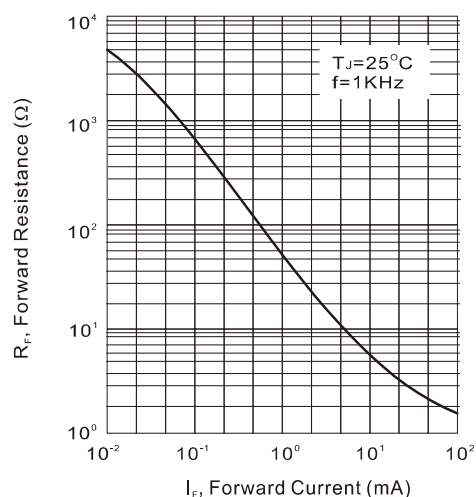


Fig.4 Dynamic Forward Resistance Versus Forward Current

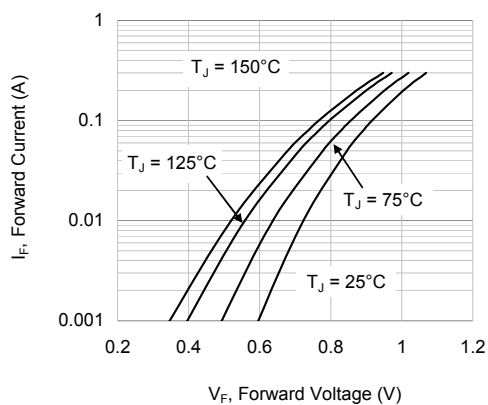


Fig.5 Typical Forward Characteristics

1N4148

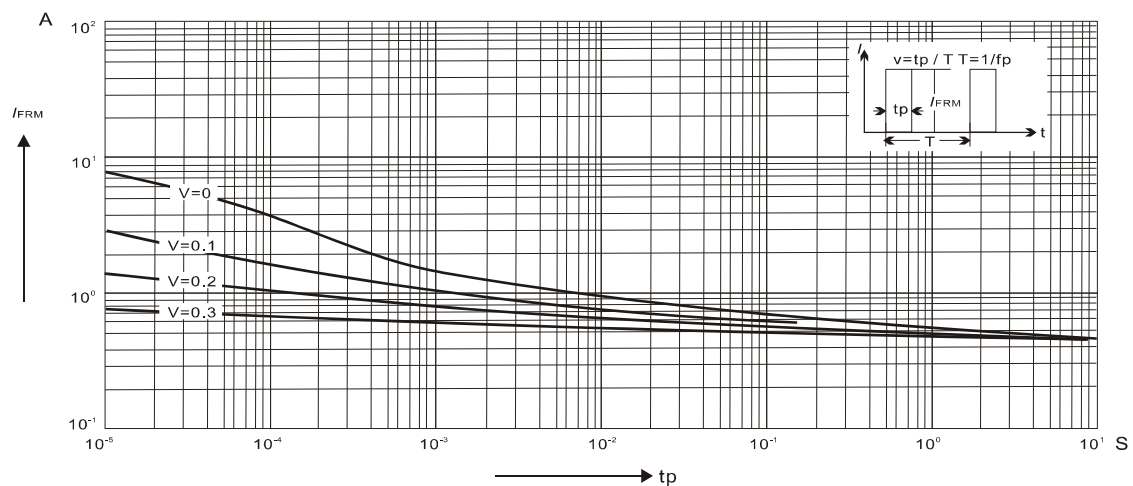


Fig.6 Admissible Repetitive Peak Forward Current Versus Pulse Duration

1N4148

Part No_packing code_Version

1N4148-34_AX_10001

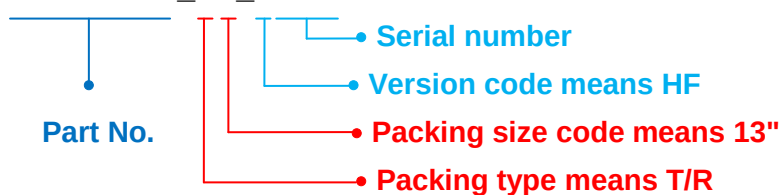
1N4148-34_AY_10001

1N4148-34_B0_10001

1N4148-34_R2_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

1N4148

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.