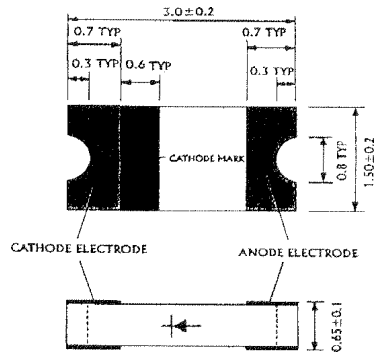




Description

SWITCHING CHIP DIODE  
Mechanical Dimensions

CD4148



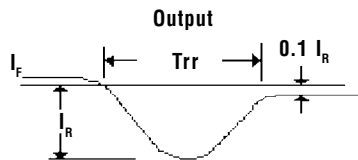
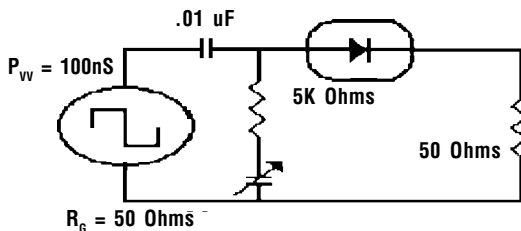
Features

- ELECTRICALLY IDENTICAL TO JEDEC 1N4148
- 350 mW POWER DISSIPATION

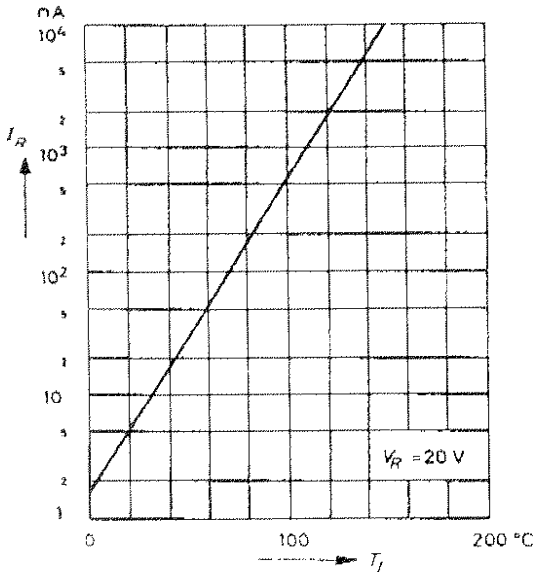
- INDUSTRY STANDARD 1206 PACKAGE

Electrical Characteristics @ 25°C.	CD4148	Units
<b>Maximum Ratings</b>		
Peak Reverse Voltage... $V_{RM}$	100	Volts
RMS Reverse Voltage... $V_{R(rms)}$	75	Volts
Peak Forward Current... $I_F$	200	mAmps
Peak Forward Surge Current... $I_{FSM}$	2000	mAmps
Forward Voltage... $V_F$ @ $I_F = 10$ mA	1.0	Volts
DC Reverse Current... $I_R$ @ $V_R = 75$ v	5.0	μAmps
Power Dissipation... $P_D$	350	mW
Typical Junction Capacitance... $C_J$	4	pF
Reverse Recovery Time... $T_{RR}$	4	nS
Operating Temperature... $T_J$	175	°C
Storage Temperature Range... $T_{STRG}$	-55 to 150	°C

Device Under Test

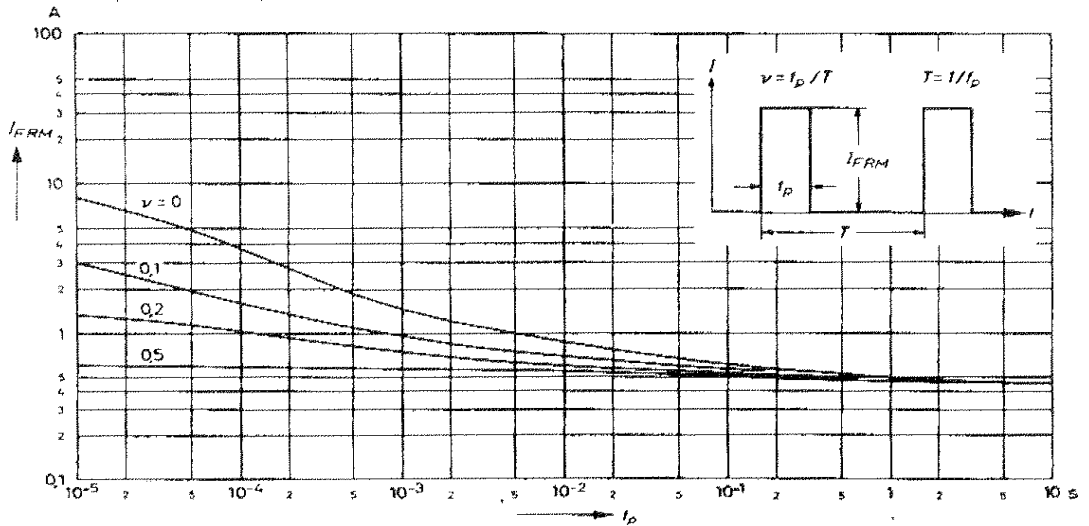


**Leakage current  
versus junction temperature**



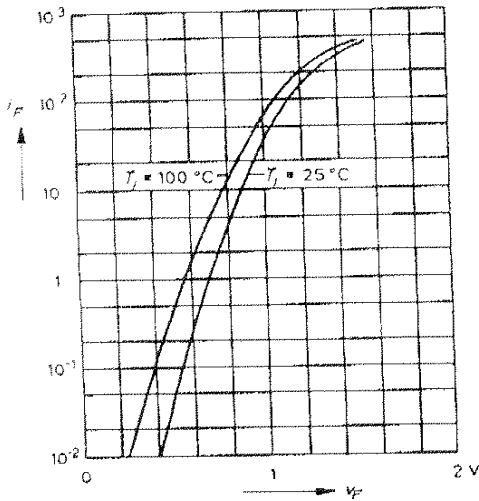
**Admissible repetitive peak forward current versus pulse duration**

Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature

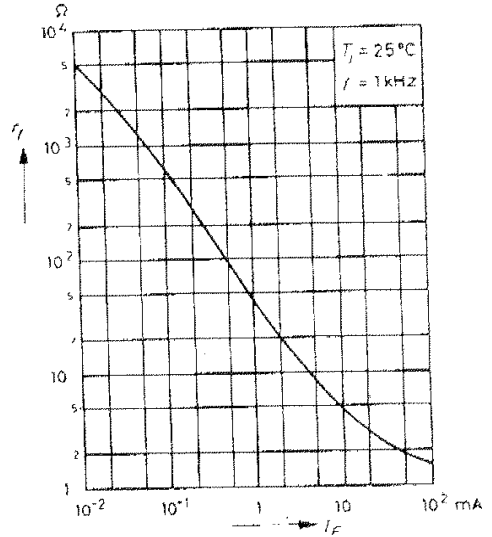


# CD4148 SWITCHING CHIP DIODE

Forward characteristics

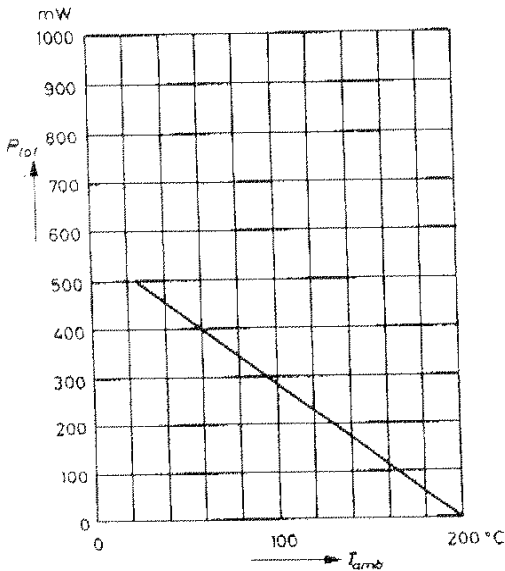


Dynamic forward resistance  
versus forward current

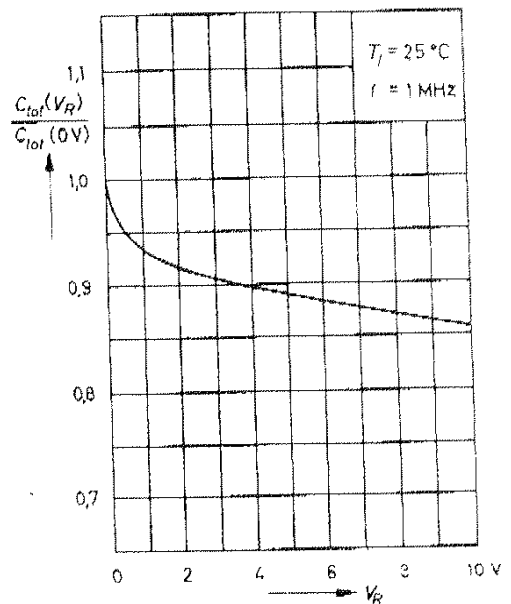


Admissible power dissipation  
versus ambient temperature

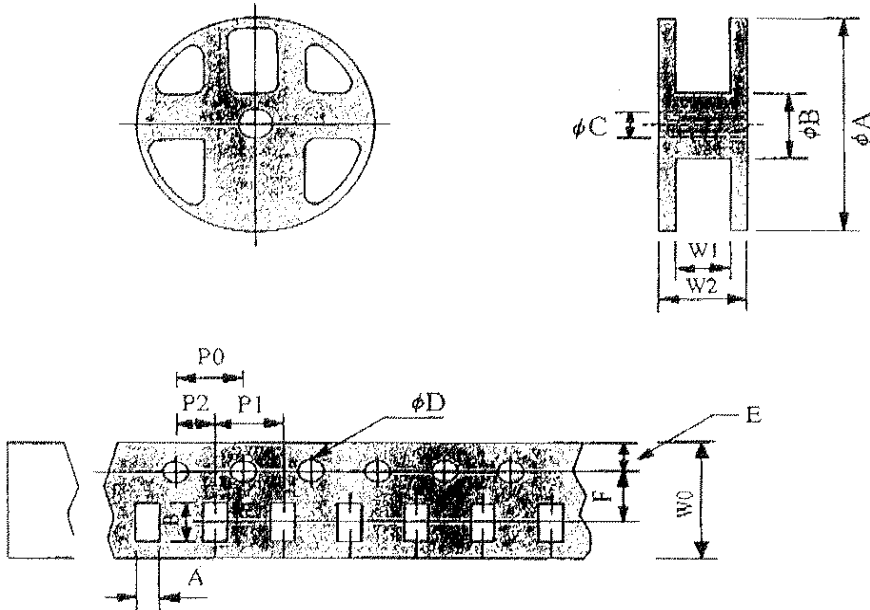
Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature



Relative capacitance  
versus reverse voltage



Taping Specifications



Item	Symbol	Specification (mm)	Specification (inch)
Carrier width	A	2.00 ± 0.20	0.079 ± 0.008
Carrier length	B	3.60 ± 0.20	0.142 ± 0.008
Reel outside diameter	φA	φ178.00 ± 2.00	φ7.008 ± 0.080
Reel inner diameter	φB	φ80.00 ± 1.00	φ3.150 ± 0.030
Feed hole diameter	φC	φ13.50 ± 0.50	φ0.512 ± 0.020
Sprocket hole	φD	φ1.50 ± 0.10	φ0.059 ± 0.004
Sprocket hole position	E	1.75 ± 0.10	0.069 ± 0.004
Punch hole position	F	3.50 ± 0.05	0.138 ± 0.002
Sprocket hole pitch	P0	4.00 ± 0.10	0.157 ± 0.004
Punch hole pitch	P1	4.00 ± 0.10	0.157 ± 0.004
Embossment center	P2	2.00 ± 0.05	0.079 ± 0.002
Tape width	W0	8.00 ± 0.30	0.315 ± 0.012
Reel inner width	W1	9.80 ± 1.50	0.386 ± 0.060
Reel outside width	W2	12.50 ± 1.50	0.496 ± 0.060