



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

1N4148  
THRU  
1N4448

**TECHNICAL SPECIFICATIONS OF HIGH SPEED SWITCHING DIODES**

VOLTAGE RANGE -50 to 100 Volts

CURRENT - 0.15 to 0.2 Ampere

**FEATURES**

- \* Silicon epitaxial planar diodes
- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage
- \* High speed switching
- \* High current capability
- \* High reliability

**MECHANICAL DATA**

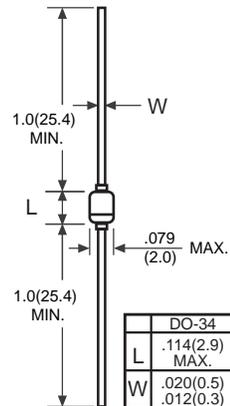
- \* Case: Glass sealed case
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.13 gram

**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%.



DO-34/DO-35



Dimensions in inches and (millimeters)

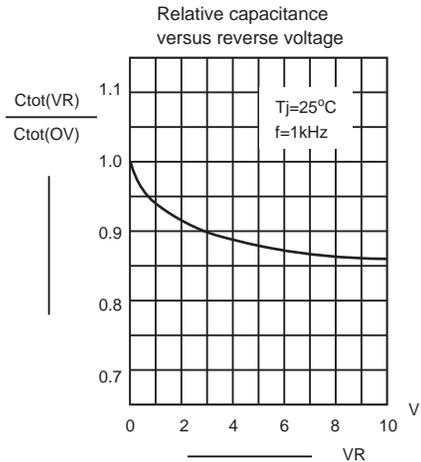
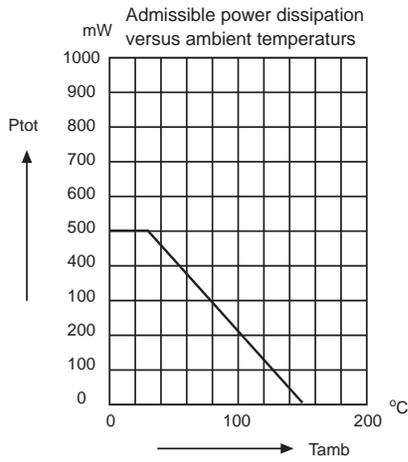
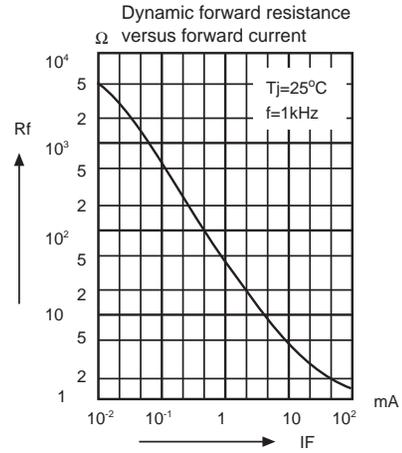
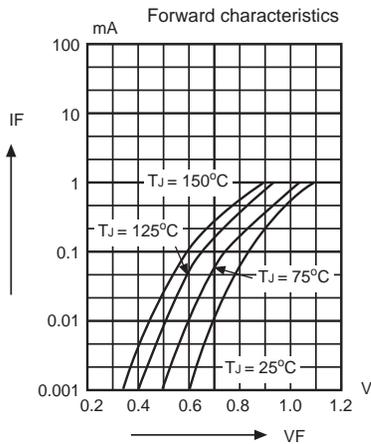
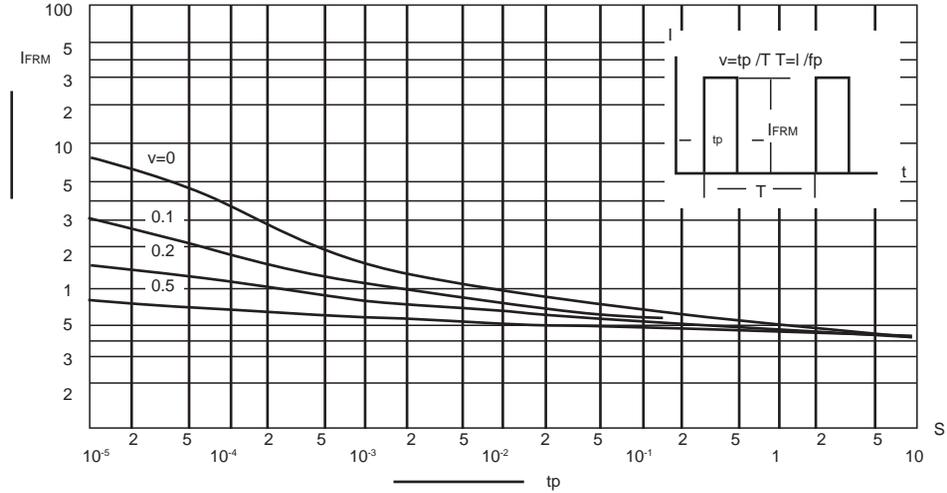
	SYMBOL	1N4148	1N4150	1N4151	1N4448	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	100	50	75	100	V
Maximum Average Rectified Current	I <sub>o</sub>	150	200	150	150	mA
Maximum Power Dissipation T <sub>amb</sub> = 25°C	P <sub>tot</sub>	500	500	500	500	mW
Maximum Forward Voltage	V <sub>F</sub> /I <sub>F</sub>	1.0/10	1.0/200	1.0/50	1.0/100	V/mA
Maximum Reverse Current	I <sub>R</sub> /V <sub>R</sub>	5000/75	100/50	50/50	5000/75	nA/V
Maximum Reverse Recovery Time	t <sub>rr</sub>	4.0	4.0	2.0	4.0	nS
Peak Forward Surge Current, t < 1s and T <sub>J</sub> = 25°C	I <sub>FSM</sub>	0.5				A
Typical Junction Capacitance	R <sub>θJA</sub>	300				°C / W
Typical thermal Resistance	C <sub>J</sub>	4.0				pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150				°C

NOTE: Suffix "M" stands for "DO-34" package.(e.g.:1N4148M)

# RATING AND CHARACTERISTIC CURVES (1N4148 THRU 1N4448)

REF: 1N4148

A Admissible repetitive peak forward current versus pulse duration



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