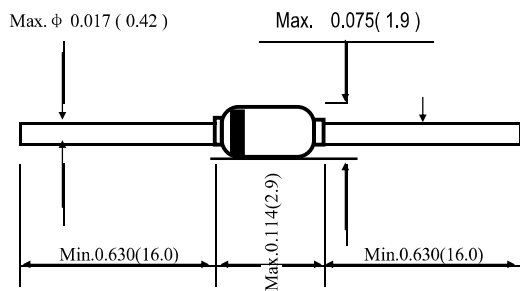


**外形尺寸和印记 Outline Dimensions and Mark**  
**DO - 34(GLASS)**


inch ( mm )

**Features**

- Silicon epitaxial planar diode
- High speed switching diode
- 500mW power dissipation

**Mechanical Data**

- Cases: Min-MELF glass case
- Polarity: Color band denotes cathode
- Weight: Approx. 0.05 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

**Maximum Ratings**

Type Number		1N4148	Units
DC Block Voltage	VR	75	V
Non-Peak Reverse Voltage	VRM	100	V
Average Forward Rectified Current Half Wave Rectification with Resist load	IO	150	mA
Forward Surge Current at t<1s and Tj<25°C	IFSM	500	mA
Power Classification at Tj	Ptot	500 <sup>(1)</sup>	mW
Junction Temperature	TJ	175	°C
Storage Temperature Range	TSTG	-65 to +175	°C

NOTE:(1)Valid provided that

**Electrical Characteristics**

		Min	Typ	Max	Units
Forward Voltage at IF=10mA	VF	—	—	1	
Leakage Current at VR=20V at VR=75V at VR=20V, Tj=150°C	IR	—	—	25	nA
	IR	—	—	5	uA
	IR	—	—	50	uA
Capacitance at VF=VR=0V	Cj	—	—	4	pF
Voltage Rise when Switching ON loaded with 50mA pulse tp 0.1us Rise Time<30ns Ip=5 to 100Hz	Vtt	—	—	2.5	V
Reverse Recovery Time from IF=10mA VR=V, RL=100 Ω at IR=1mA	trr	—	—	4	ns
Thermal Resistance Junction to Ambient	R θJA	—	—	350	K/W
Rectification Efficiency at 100MHz, Ver<2V	nV	0.45	—	—	—

NOTE: (1)Valid provided that electrodes are kept at ambient temperature.

■ 特性曲线 (典型) Characteristics(Typical)

FIG.1-FORWARD CHARACTERISTICS CURVE

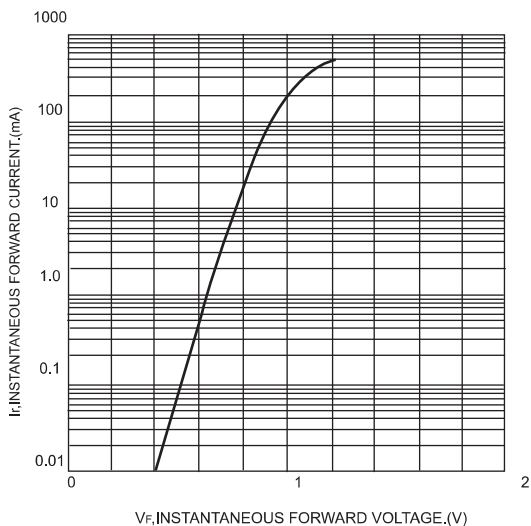


FIG.2-FORWARD CHARACTERISTICS CURVE

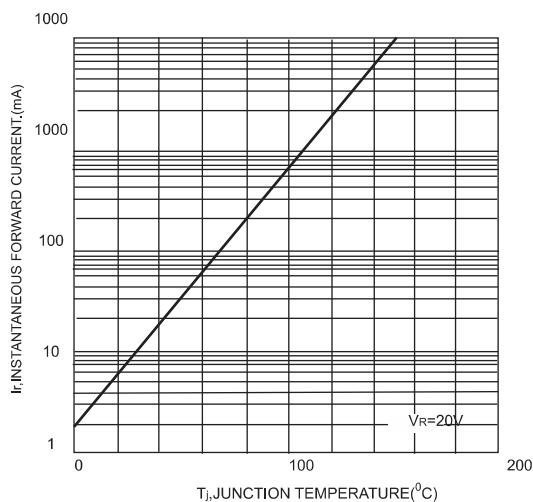


FIG.3-ADMISSIBLE POWER DISSIPATION VS AMBIENT TEMPERATURE

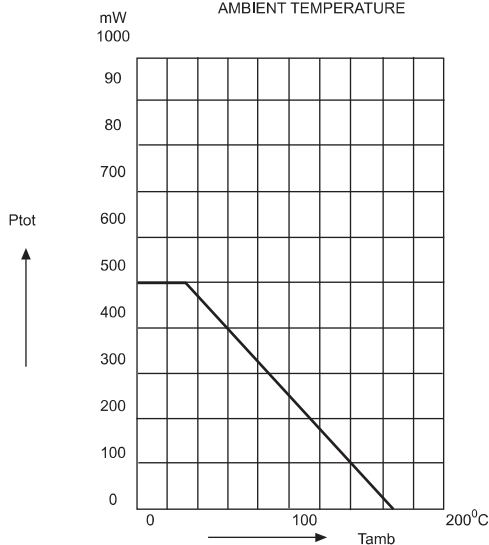


FIG.4-RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

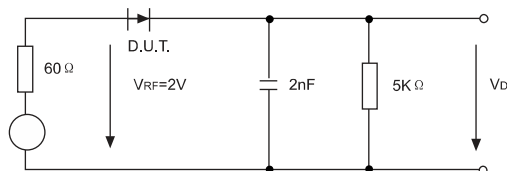


FIG.5- RELATIVE CAPACITANCE VERSUS VOLTAGE

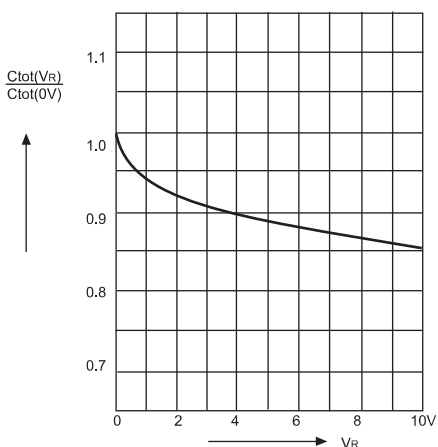


FIG.6-LEAKAGE CURRENT VERSUS JUNCTION TEMPERATURE

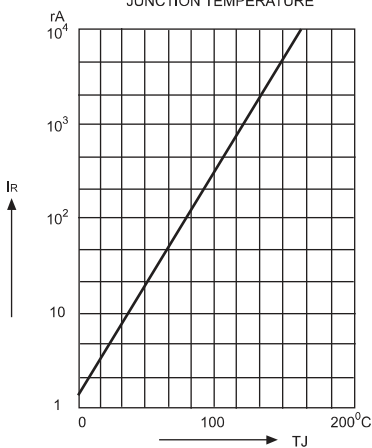


FIG.7-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

