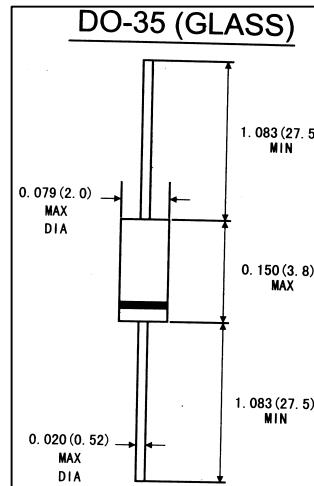


FEATURES

- . Silicon epitaxial planar diode
- . Fast switching diodes
- . 500mW power dissipation
- . The diode is also available in the Mini-Melf case with the type designation LL4148

MECHANICAL DATA

- . **Case:** DO-35 glass case
- . **Polarity:** Color band denotes cathode end
- . **Weight:** Approx. 0.13gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified)

	Symbol	Value	Units
Reverse voltage	V _R	75	Volts
Peak reverse voltage	V _{RM}	100	Volts
Average rectified current, Half wave rectification with Resistive load at TA=25°C and F≥50Hz	I _{AV}	150	mA
Surge forward current at t<1S and TJ=25°C	I _{FSM}	500	mA
Power dissipation at TA=25°C	P _{tot}	500(1)	mW
Junction temperature	T _J	175	°C
Storage temperature range	T _{STG}	-65 to + 175	°C

1)Valid provided that at a distance of 8mm from case are kept at ambient temperature(DO-35)

ELECTRICAL CHARACTERISTICS

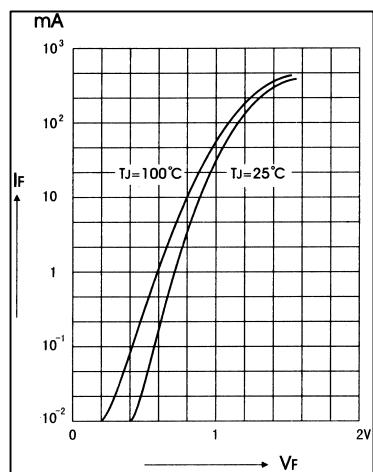
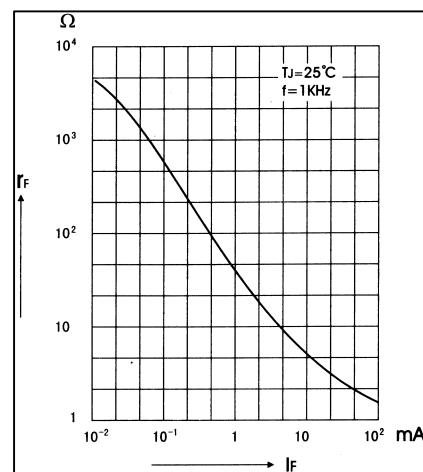
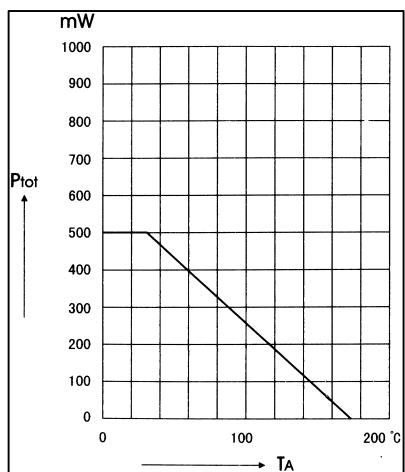
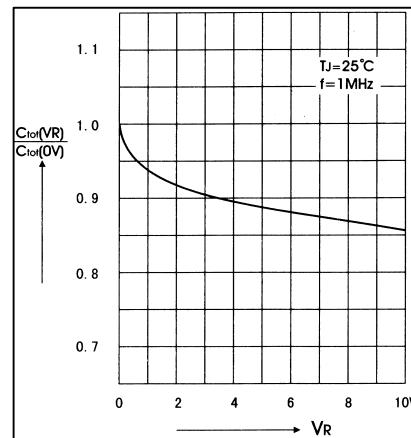
(Ratings at 25°C ambient temperature unless otherwise specified)

	Symbols	Min.	Typ.	Max.	Units
Forward voltage	V _F			1	Volts
Leakage current at V _R =20V	I _R			25	nA
at V _R =75V	I _R			5	nA
at V _R =20V, TJ=150°C	I _R			50	nA
Junction capacitance at V _R =V _F =0V	C _J			4	pF
Voltage rise when switching ON tested with 50mA pulse T _p =0.1 μS, Rise time<30 μS, f _p =5 to 100KHz	V _{fr}			2.5	Volts
Reverse recovery time from I _F =10mA to I _R =1mA, V _R =6V, R _L =100 Ω	t _{rr}			4	ns
Thermal resistance junction to ambient	R _{θ JA}			350	K/W
Rectification efficiency at f=100MHz, V _{RF} =2V	η	0.45			

1)Valid provided that leads at a distance of 8mm from case are kept at ambient temperature(DO-35)

CE

CHENYI ELECTRONICS

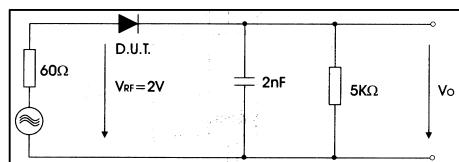
1N4148**SMALL SIGNAL SWITCHING DIODE****RATINGS AND CHATACTERISTIC CURVES 1N4148****FLG.1-FORWARD CHARACTERISTICS****FIG.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT****FIG.3-ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE****FIG.4-RELATIVE CAPACITANCE VERSUS VOLTAGE**

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1N4148**SMALL SIGNAL SWITCHING DIODE**

**FIG.5-RECTIFICATION EFFICIENCY MEASUREMENT
CIRCUIT**



**FIG.6-LEAKAGE CURRENT VERSUS JUNCTION
TEMPERATURE**

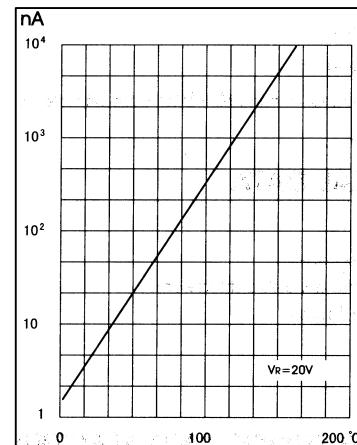


FIG.7-ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

