

開關二極管 Switching Diode

Switching Diode 開關二極管

FH1N4148

DESCRIPTION & FEATURES 概述及特點

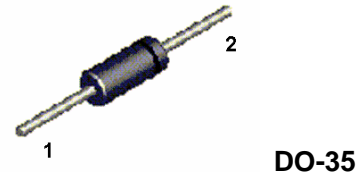
Low forward voltage 低正向壓降

Fast reverse recovery time 快恢復時間

Ultra High Speed Switching Application 超高速開關應用



LL-34



DO-35

PIN ASSIGNMENT 引腳說明

PIN NAME 管腳符號	PIN NUMBER 引腳序號	FUNCTION 功能
	LL-34/DO-35	
A	1	Anode
C	2	Cathode

Maximum Ratings & Thermal Characteristics (T_a=25°C)

最大額定值及熱特性

CHARACTERISTIC 特性參數	Symbol 符號	Value 數值	Unit 單位
Maximum Peak Repetitive Reverse Voltage 最大反向峰值電壓	V _{RRM}	100	V
Maximum RMS Voltage 反向電壓	V _{RMS}	75	V
Voltage Rise when Switching ON Tested with 50mA Forward Pulses Tp=0.1s, Rise Time < 30ns, fp=5 to 100KHz	V _{FR}	2.5	V
Rectifier Current (average) Half Wave Rectification with Resist. Load At T _A =25°C and f≥50Hz 半波整流電流	I _O	150	mA
Surge Forward Current at t < 1s and T _A =25°C	I _{FSM}	500	mA
Power Dissipation at T _A =25°C	PTOT	500	mW
Thermal Resistance Junction to ambient air 熱阻	R _{θJA}	0.35	°C/mW
Junction and Storage Temperature 結溫和儲存溫度	T _J , T _{STG}	175, -65~150	°C

ELECTRICAL CHARACTERISTICS 電特性

(T_A=25°C unless otherwise noted 如無特殊說明，溫度為 25°C)

Characteristic 特性參數	Symbol 符號	Test Condition 測試條件	Min 最小值	TYPE 典型值	Max 最大值	Unit 單位
Forward Voltage 正向電壓	V _F	I _F =10mA	—	—	1.0	V
Reverse Voltage 反向電壓	V _R	I _R =100μA	75	—	—	V
Reverse Voltage Leakage Current 反向漏電流	I _R	V _R =20V	—	—	25	nA
		V _R =75V	—	—	5	μA
		V _R =20V, T _J =150°C	—	—	50	μA
Total Capacitance 電容	C _T	V _R =0, f=1.0MHz	—	—	4.0	pF
Reverse Recovery Time 反向恢復時間	t _{rr}	From I _F =10mA to I _R =1mA, V _R =6V, R=100Ω	—	—	4	nS
Rectification Efficiency 整流效率	η _r	f=100MHZ, V _{RF} =2V	0.45	—	—	—