

MOS 管 – MOSFET 功率场效应晶体管

Symbol	Parameter	中文含义
I_D	Continuous drain current	漏极直流电流
V_{GS}	Gate-source voltage	栅-源电压
V_{DS}	Drain-source voltage	漏-源电压
E_{AS}	single pulse avalanche energy	单脉冲雪崩击穿能量
$R_{th(j-a)}$	Thermal resistance from junction to ambient	结到环境的热阻
$R_{th(j-c)}$	Thermal resistance from junction to case	结到管壳的热阻
$V_{(BR)DSS}$	Drain-source breakdown voltage	漏源击穿电压
$V_{(GS)th}$	Gate threshold voltage	栅源阈值电压
I_{GSS}	Gate-body leakage current	漏-源短路的栅极电流
I_{DSS}	Zero gate voltage drain current	栅-源短路的漏极电流
$R_{DS(on)}$	Drain-source on-resistance	漏源通态电阻
g_{fs}	Forward transconductance	跨导
V_{SD}	Diode forward voltage	漏源间体内反并联二极管正向压降
C_{iss}	Input capacitance	栅-源电容
C_{oss}	Output capacitance	漏-源电容
C_{rss}	Reverse transfer capacitance	反向传输电容
R_g	Gate resistance	栅极电阻
$t_{d(on)}$	Turn-on delay time	开通延迟时间
t_r	Rise time	上升时间
$t_{d(off)}$	Turn-off delay time	关断延迟时间
t_f	Fall time	下降时间
I_{DM}	Pulsed drain current	最大脉冲漏电流
P_D	Power dissipation	耗散功率
T_j	operating junction temperature range	工作结温
T_{stg}	storage temperature range	存储温度

Schottky Rectifier Diodes 肖特基整流二极管

Symbol	Parameter	中文含义
V_{RRM}	Peak repetitive reverse voltage	反向重复峰值电压
V_{RWM}	Working peak reverse voltage	反向工作峰值电压
V_R	DC Blocking Voltage	反向直流电压
$V_{R(RMS)}$	RMS Reverse Voltage	反向电压有效值
$I_{F(AV)}$	Average Rectified Forward Current	正向平均电流
I_R	Reverse Current	反向电流
I_{FSM}	Non-Repetitive Peak Forward Surge Current	正向浪涌电流
V_F	Forward Voltage	正向直流电压
C_j	Typical Junction Capacitance	结电容
P_D	Power Dissipation	耗散功率
T_j	Operating Junction Temperature	工作结温
T_{stg}	Storage Temperature Range	存储温度
$R_{th(j-a)}$	Thermal Resistance from Junction to Ambient	结到环境的热阻

SCR-Thyristor 可控硅-晶闸管元件

Symbol	Parameter	中文含义
V_{RRM}	Peak repetitive off-state voltage	断态重复峰值电压
V_{RRM}	Peak repetitive reverse voltage	反向重复峰值电压
$I_{T(RMS)}$	RMS On-state current	额定通态电流
I_{TSM}	Non repetitive surge peak on-state current	通态非重复浪涌电流
I_{GM}	Forward peak gate current	控制极重复峰值电流
V_{TM}	peak forward on-state voltage	通态峰值电压
I_{GT}	Gate trigger current	控制极触发直流电流
V_{GT}	Gate trigger voltage	控制极触发电压
I_H	Holding current	维持电流
I_{DRM}	Peak repetitive off-state current	断态重复峰值电流
I_{RRM}	Peak repetitive reverse current	反向重复峰值电流
$P_{G(AV)}$	Average gate power dissipation	控制极平均功率
T_j	Operating Junction Temperature	工作结温
T_{stg}	Storage Temperature Range	存储温度
$R_{th(j-a)}$	Thermal Resistance from Junction to Ambient	结到环境的热阻

Transistor 晶体管（普通三极管）

Symbol	Parameter	中文含义
V_{CBO}	Collector-Base voltage	发射极开路, 集电极-基极电压
V_{CEO}	Collector-emitter voltage	基极开路, 集电极-发射极电压
V_{EBO}	Emitter-base voltage	集电极开路, 发射极-基极电压
I_C	Collector current	集电极电流
P_C	Collector power dissipation	集电极耗散功率
T_j	Junction temperature	工作结温
T_{stg}	storage temperature range	存储温度
$V_{(BR)CBO}$	Collector-Base breakdown voltage	发射极开路, 集电极-基极反向电压
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	基极开路, 集电极-发射极反向电压
$V_{(BR)EBO}$	Emitter-base breakdown voltage	集电极开路, 发射极-基极反向电压
I_{CBO}	Collector cut-off current	发射极开路, 集电极-基极截止电流
I_{EBO}	Emitter cut-off current	集电极开路, 发射极-基极截止电流
I_{CEO}	Collector cut-off current	基极开路, 集电极-发射极截止电流
h_{FE}	DC current gain	共发射极正向电流传输比的静态值
V_{CEsat}	Collector-emitter saturation voltage	集电极-发射极饱和电压
V_{BEsat}	Base-emitter saturation voltage	基极-发射极饱和电压
V_{BE}	Base-emitter voltage	基极-发射极电压
f_T	Transition frequency	特征频率
C_{obo}	Collector output capacitance	共基极输出电容
C_{ibo}	Collector input capacitance	共基极输入电容
F	Noise figure	噪声系数
t_{on}	Turn-on time	开通时间
t_{off}	Turn-off time	关断时间
t_r	Rise time	上升时间
t_s	Storage time	存储时间
t_f	Fall time	下降时间
t_d	Delay time	延迟时间