

SLA5021

查询SLA5021供应商

N-channel
General purpose

捷多邦，专业PCB打样工厂，24小时加急出货

External dimensions A...SLA

Absolute maximum ratings

(Ta=25°C)

Symbol	Ratings	Unit
V _{DSS}	100	V
V _{GSS}	±10	V
I _D	±5	A
I _{D(pulse)}	±10 (PW≤1ms)	A
E _{AS*}	60	mJ
P _T	5 (Ta=25°C, with all circuits operating, without heatsink) 35 (Tc=25°C, with all circuits operating, with infinite heatsink)	W
θ _{j-a}	25 (Junction-Air, Ta=25°C, with all circuits operating)	°C/W
θ _{j-c}	3.57 (Junction-Case, Tc=25°C, with all circuits operating)	°C/W
V _{iso}	1000 (Between fin and lead pin, AC)	Vrms
T _{ch}	150	°C
T _{stg}	-40 to +150	°C

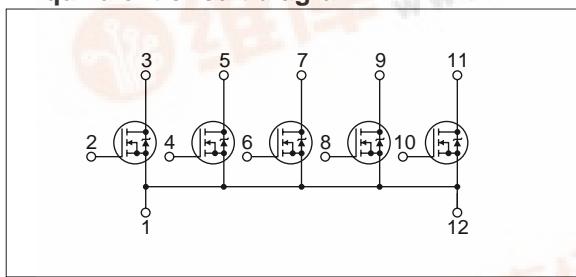
* : V_{DD}=20V, L=10mH, I_D=3A, unclamped, see Fig. E on page 15.

Electrical characteristics

(Ta=25°C)

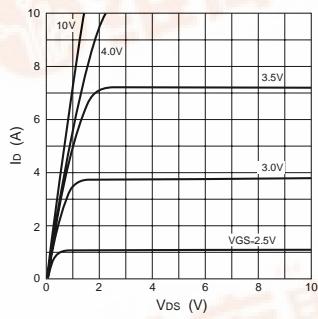
Symbol	Specification			Unit	Conditions
	min	typ	max		
V _{(BR)DSS}	100			V	I _D =250μA, V _{GS} =0V
I _{GSS}			±500	nA	V _{GS} =±10V
I _{DSS}			250	μA	V _{DS} =100V, V _{GS} =0V
V _{TH}	1.0		2.0	V	V _{DS} =10V, I _D =250μA
R _{e(yfs)}	4	6		S	V _{DS} =10V, I _D =5A
R _{D(on)}		0.18	0.19	Ω	V _{GS} =10V, I _D =2.5A
		0.19	0.25	Ω	V _{GS} =4V, I _D =2.5A
C _{iss}		880		pF	V _{DS} =25V, f=1.0MHz,
C _{oss}		240		pF	V _{GS} =0V
t _{on}		90		ns	I _D =5A, V _{DD} =50V, V _{GS} =5V, see Fig. 3 on page 16.
t _{off}		75		ns	
V _{SD}		1.1	1.5	V	I _{SD} =5A, V _{GS} =0V
t _{rr}		500		ns	I _{SD} =±100mA

■Equivalent circuit diagram

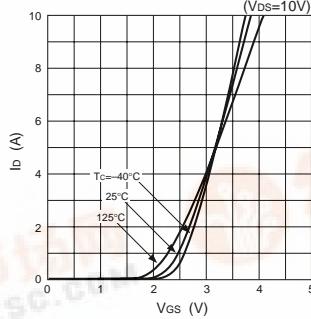


Characteristic curves

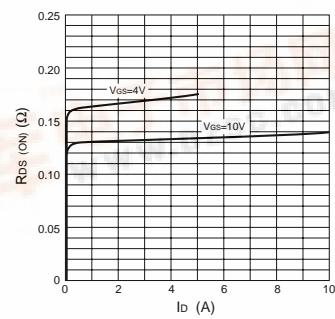
Id-Vds Characteristics (Typical)



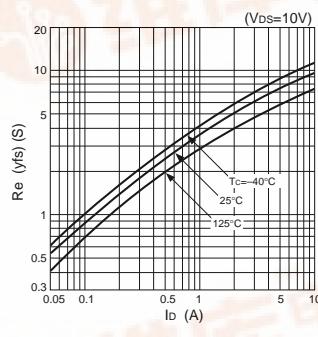
Id-Vgs Characteristics (Typical)



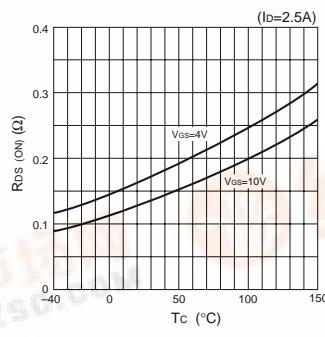
Rds(on)-Id Characteristics (Typical)



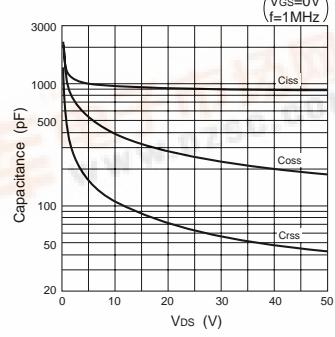
Re(yfs)-Id Characteristics (Typical)



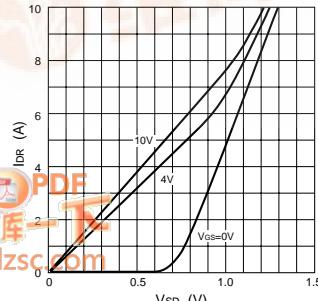
Rds(on)-Tc Characteristics (Typical)



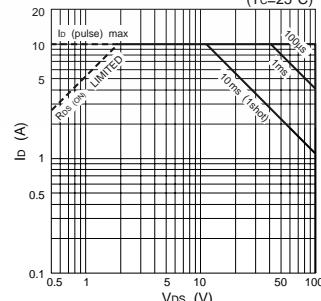
Capacitance-Vds Characteristics (Typical)



Idr-Vsd Characteristics (Typical)



Safe Operating Area (SOA)



Pr-Ta Characteristics

