

5DS31M

Switching Diode

PHENITEC
SEMICONDUCTOR

Features

- High-Voltage Diode

Item	Characteristics
Wafer size	5 inch
Chip size	410*410um

Maximum Ratings @25degC

Item	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RSM}	300	V
Repetitive Peak Reverse Voltage	V _{RRM}	300	V
Repetitive Peak Forward Current	I _{FRM}	625	mA
Continuous Forward Current	I _O	225	mA
Non-Repetitive Peak Forward Current @t=1us	I _{FSM}	4.0	A
Power Dissipation	P _D	250	mW
Junction Temperature	T _j	160	degC
Storage Temperature	T _{stg}	-65to+160	degC

Electrical Characteristics @25degC

Item	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	V _F		1.0	V	I _F =100mA
Breakdown Voltage	V _B	300		V	I _R =100uA
Reverse Current	I _R		100.0	nA	V _R =240V, T _j =25degC
			100.0	uA	V _R =240V, T _j =150degC
Capacitance	C _T		5.0	pF	V _R =0V, f=1MHz
Reverse Recovery Time	t _{rr}		50.0	nsec	I _F =I _R =30mA R _L =100Ω, i _{rr} =3mA

Wafer Probing Spec @25degC

Symbol	Min	Max	Unit	Test Condition
V _{F1}		870	mV	I _F =20mA
V _{F2}		980	mV	I _F =100mA
V _{F3}		1.2	V	I _F =200mA
I _R		98	nA	V _R =240V
V _{B1}	285		V	I _R =5uA
V _{B2}	305		V	I _R =100uA

Ordering Information

Chip Type	Chip Thickness	Back Metalization
5DS31MH	230±15um	Au/As-Au (For AgEpoxy/Eutectic)
5DS31MG	230±15um	Au/As (For Eutectic)
5DS31MS	180±15um	Au/As (For Eutectic)
5DS31MT	150±15um	Au/As-Au (For AgEpoxy/Eutectic)
5DS31MM	100±15um	Au/As (For Eutectic)

Note

Equivalent type : BAS21

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