

5DS31M

Switching Diode



Features

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- High – Voltage Diode

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

Maximum Ratings @25degC

Item	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	VRSM	300	V
Repetitive Peak Reverse Voltage	VRRM	300	V
Repetitive Peak Forward Current	IFRM	625	mA
Continuous Forward Current	IO	225	mA
Non-Repetitive Peak Forward Current @t=1us	IFSM	4.0	A
Power Dissipation	PD	250	mW
Junction Temperature	Tj	160	degC
Storage Temperature	Tstg	-65to+160	degC

Electrical Characteristics @25degC

Item	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	VF		1.0	V	IF=100mA
Breakdown Voltage	BV	300		V	IR=100uA
Reverse Current	IR		100.0	nA	VR=240V, Tj=25degC
			100.0	uA	VR=240V, Tj=150degC
Capacitance	CT		5.0	pF	VR=0V, f=1MHz
Reverse Recovery Time	trr		50.0	nsec	IF=IR=30mA RL=100Ω, irr=3mA

Wafer Probing Spec @25degC

Symbol	Min	Max	Unit	Test Condition
VF1		870	mV	IF=20mA
VF2		980	mV	IF=100mA
VF3		1.2	V	IF=200mA
IR		98	nA	VR=240V
BV1	285		V	IR=5uA
BV2	305		V	IR=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

SheetNo.

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