

5DS04M

Switching Diode

PHENITEC
SEMICONDUCTOR

Features

- High-speed

Item	Characteristics
Wafer size	5inch
Chip size	280*280um

Maximum Ratings @25degC

Item	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	VRSM	105	V
Repetitive Peak Reverse Voltage	VRRM	100	V
Repetitive Peak Forward Current	IFRM	300	mA
Continuous Forward Current	IO	100	mA
Non-Repetitive Peak Forward Current @t=1us	IFSM	2.0	A
Power Dissipation	PD	200	mW
Junction Temperature	Tj	150	degC
Storage Temperature	Tstg	-55to+150	degC

Electrical Characteristics @25degC

Item	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	VF		1.2	V	IF=100mA
Breakdown Voltage	BV	105		V	IR=100uA
Reverse Current	IR		25.0	nA	VR=30V
			10.0	uA	VR=100V
Capacitance	CT		2.0	pF	VR=0V, f=1MHz
Reverse Recovery Time	trr		4.0	nsec	IF=10mA, VR=6V, RL=100Ω, irr=1mA

Wafer Probing Spec @25degC

Symbol	Min	Max	Unit	Test Condition
VF1		670	mV	IF=1mA
VF2		830	mV	IF=10mA
VF3		970	mV	IF=50mA
VF4		1.04	V	IF=100mA
VF5		1.12	V	IF=150mA
BV	105		V	IR=100uA
IR1		22.0	nA	VR=25V
IR2		45.0	nA	VR=100V

Ordering Information

Chip Type	Chip Thickness	Back Metalization
5DS04MG	230±15um	Au/As (For Eutectic)
5DS04MM	100±15um	Au/As (For Eutectic)
5DS04MR	150±15um	Au/As (For Eutectic)

Note Equivalent type : 1N4148

SheetNo.

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