

# 5DS05M

## Switching Diode

**PHENITEC**  
SEMICONDUCTOR

### Features

- High-speed

Item	Characteristics
Wafer size	5inch
Chip size	260*260um
Pad size	105*105um
Scribe line width	60um
Top Metalization	Al
Chip Quantity	161,136pcs/wafer

### 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
VF		1.14	V	IF=100mA
BV	105		V	IR=100uA
IR1		25.0	nA	VR=30V
IR2		10.0	uA	VR=100V

### Ordering Information

Chip Type	Chip Thickness	Back Metalization
5DS05MH	230±15um	Au/As-Au (For AgEpoxy/Eutectic)
5DS05MR	150±15um	Au/As (For Eutectic)
5DS05MQ	135±15um	Au/As-Au (For AgEpoxy/Eutectic)
5DS05MM	100±15um	Au/As (For Eutectic)

**Note** Equivalent type : 1N4148

SheetNo.

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