# MSKSEMI 美森科













ESD

TVS

TSS

MOV

GDT

PLED

MS05A40LD

## **Product specification**





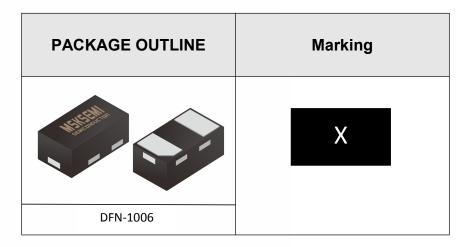
### FEATURES

- Low Forward Voltage Drop
- Extremely Small DFN1006 Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Band Indicates Cathode
- Tape and reel: 10,000Pcs/ 7" reel

#### **APPLICATIONS**

- Low voltage rectification
- Reverse polarity protection
- Low power consumption applications

#### **Reference News**





### MAXIMUM RATING (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
VRRM	Maximum repetitive reverse voltage	40	V
VR	Maximum DC blocking reverse voltage	40	V
IF(AV)	Average Forward Current	500	mA
IFSM	Peak Forward Surge Current (At 8.3ms single half sine-wave)	5	А
TJ	Operating Junction Temperature	-55 to +125	°C
TSTG	Storage Temperature Range	-55 to +150	°C

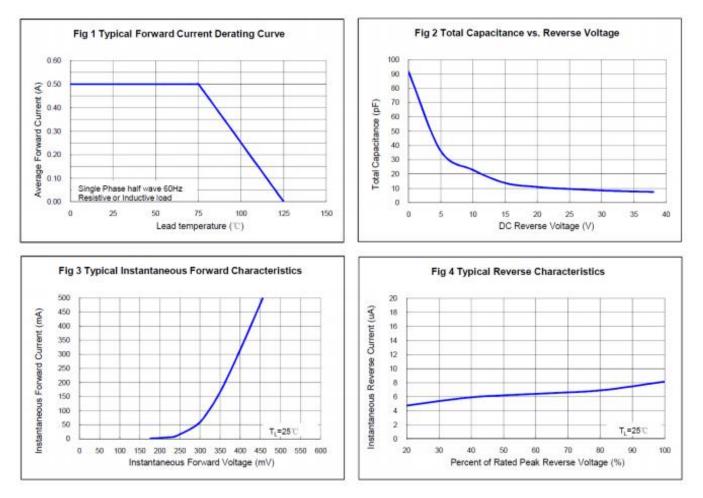
These ratings are limiting values above which the serviceability of the diode may be impaired.

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit
Breakdown Voltage at IR=100uA	VBR	40			v
Reverse Leakage Current at VR=20V	IR			50	μA
Reverse Leakage Current at VR=40V	IR			80	μA
Forward Voltage at IF=100mA	VF			0.37	V
Forward Voltage at IF=500mA	VF			0.50	V
Junction Capacitance VR = 5V, f = 1MHz	CJ		36		pF

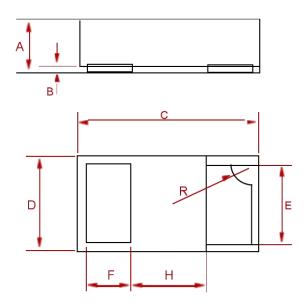


## **ELECTRICAL CHARACTERISTICS CURVE**



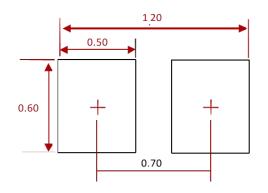


PACKAGE MECHANICAL DATA



Dim	Inches		Millimeters		
Dim	MIN	МАХ	MIN	МАХ	
A	0.0125	0.02	0.32	0.52	
В	0.000	0.002	0.00	0.05	
С	0.037	0.043	0.95	1.080	
D	0.022	0.027	0.55	0.680	
Е	0.016	0.024	0.40	0.60	
F	0.008	0.012	0.20	0.30	
Н	0.015Typ.		0.40 Typ.		
R	0.001	0.005	0.05	0. 15	

## Suggested Pad Layout



#### NOTES:

- 1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
- 2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.

## **REEL SPECIFICATION**

P/N	PKG	QTY
MS05A40LD	DFN1006	10000



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