

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

NSR10404NX-MS

Product specification

FEATURES

- Ultra Small mold type. (DFN1006-2L)
- Low IR
- High reliability.

Mechanical Characteristics

- Mounting position: Any
- Device meets MSL 1 requirements
- Qualified max reflow temperature:260℃
- DFN1006-2L without plating


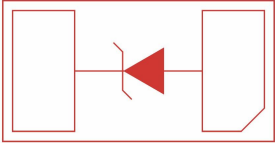
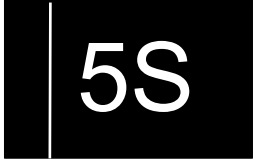
APPLICATIONS

- Low current rectification

Construction

- Silicon epitaxial planar

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
		
<p>DFN-1006</p>		

Electrical characteristics perline@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.35	0.40	V	$I_F=100\text{mA}$
Forward voltage	V_F	-	0.45	0.50	V	$I_F=500\text{mA}$
Forward voltage	V_F	-	0.55	0.60	V	$I_F=1\text{A}$
Reverse current	I_R	-	-	0.1	mA	$V_R=40\text{V}$
Junction Capacitance	C_j	-	90	-	pF	$V_R=0\text{V}$ $f=1\text{MHz}$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage(repetitive peak)	V_{RM}	45	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	1	A
Non-Repetitive Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I_{FSM}	5	A
Repetitive peak forward current ($t_p \leq 1\text{ms}$; $\delta \leq 0.25$)	I_{FRM}	5	A
Power Dissipation	PD	400	W
Thermal resistance ¹⁾	$R_{\theta JA}$	310	°C/W
Operating Junction temperature Range	T_j	-55 to 125	°C
Storage temperature	T_{stg}	-55 to 125	°C

Note1 :FR-4 PCB, minimum recommended pad layout.

Typical Characteristics

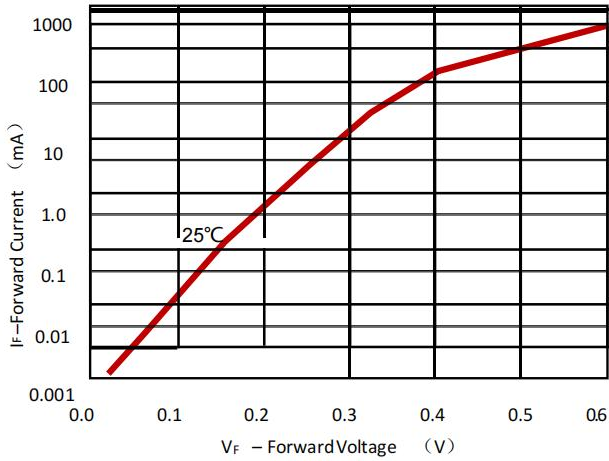


Fig 1. Forward Voltage

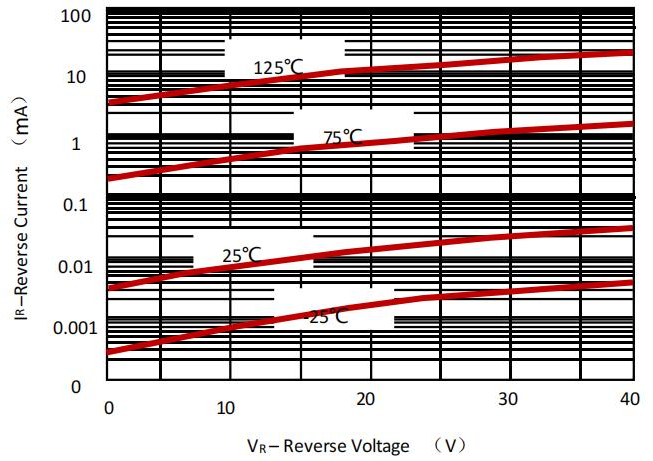


Fig 2. Leakage Current

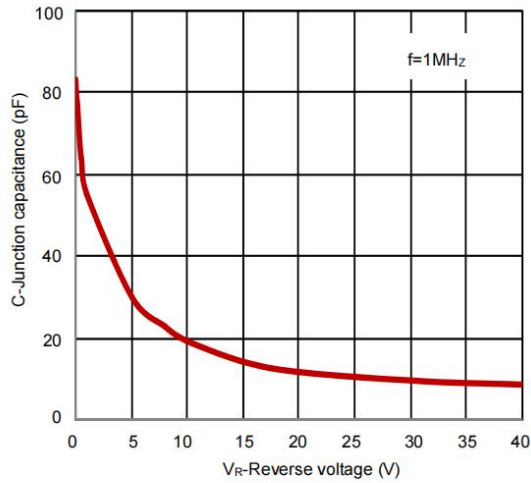
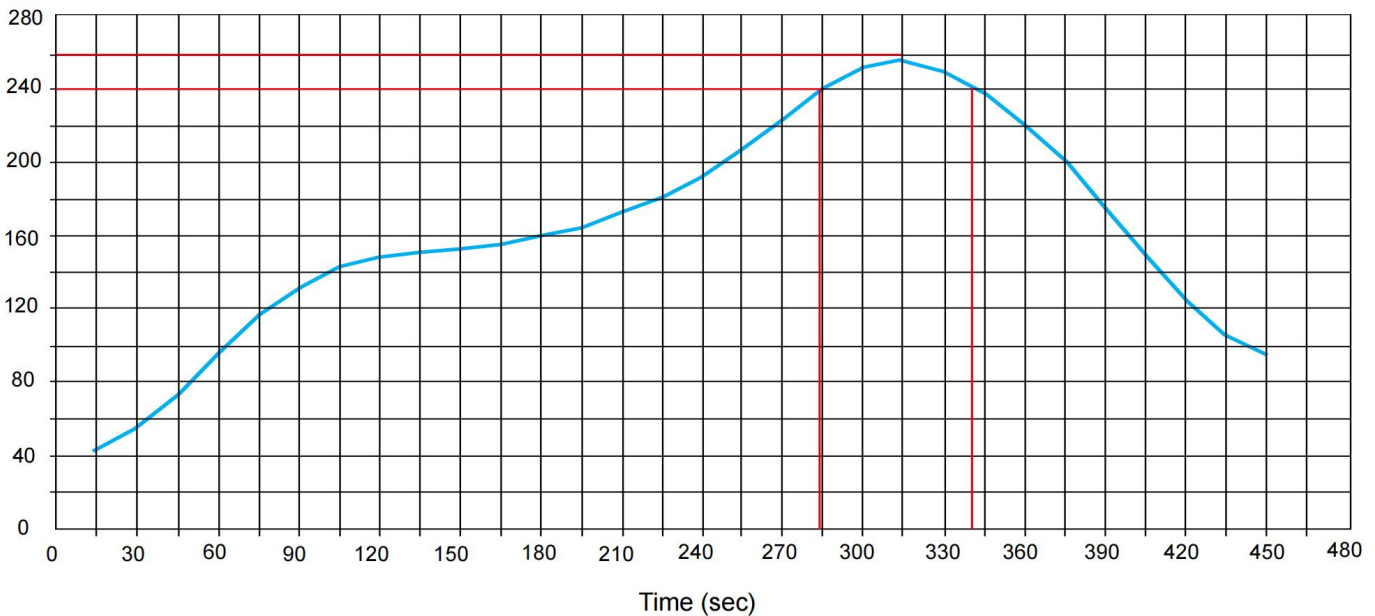


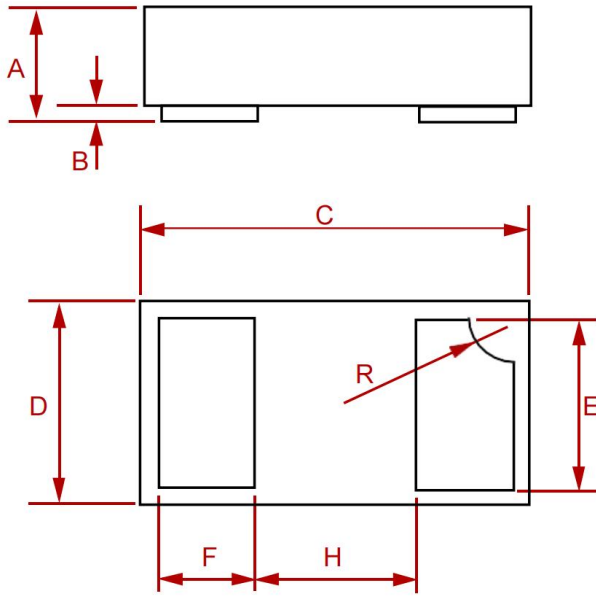
Fig 3. Capacitance vs. Reverse voltage

Solder Reflow Recommendation

Peak Temp=257°C , Ramp Rate=0.802deg. °C/sec

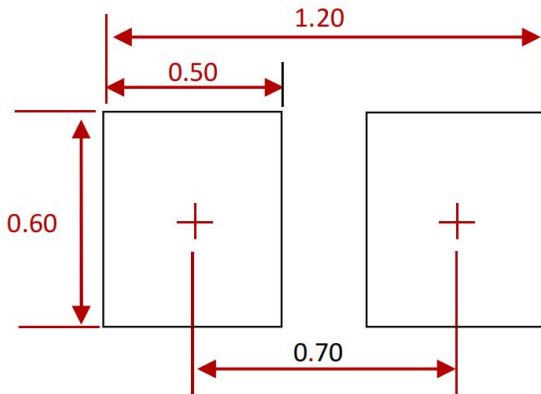


PACKAGE MECHANICAL DATA



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.0125	0.02	0.32	0.52
B	0.000	0.002	0.00	0.05
C	0.037	0.043	0.95	1.080
D	0.022	0.027	0.55	0.680
E	0.016	0.024	0.40	0.60
F	0.008	0.012	0.20	0.30
H	0.015Typ.		0.40Typ.	
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
NSR1040NX-MS	DFN-1006	10000

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