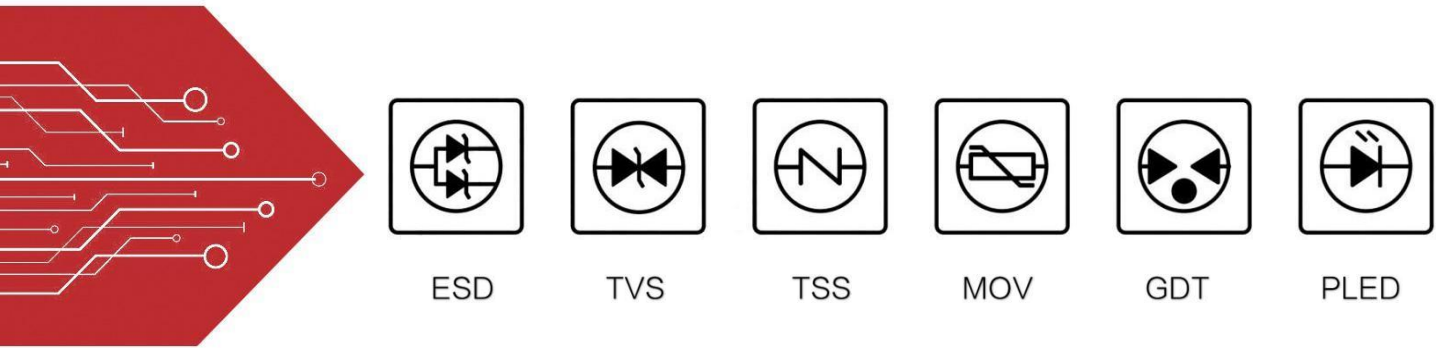
MSKSEMI
SEMICONDUCTOR



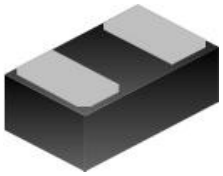
Product data sheet

Feature

Ultra Small mold type. (DFN1006)

Low I_R

High reliability.



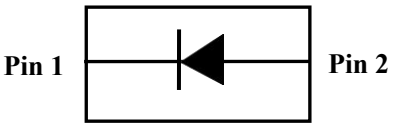
DFN1006

Applications

Low current rectification

Construction

Silicon epitaxial planar



Circuit Diagram

Mechanical Characteristics

Mounting position: Any

Device meets MSL 1 requirements

Qualified max reflow temperature:260℃

Electrical characteristics per line@25℃

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

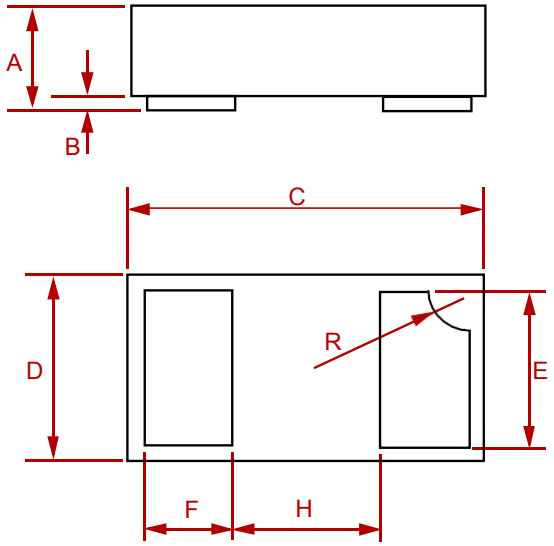
Absolute maximum rating@25℃

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

Parameter	Symbol	limits	Unit
Repetitive peak forward current ($t_p \leq 1ms; \delta \leq 0.25$)	I_{FRM}	5	A
Power Dissipation	PD	400	mW
Thermal resistance[1)]	$R_{\theta JA}$	310	℃/W
Operating Junction temperature Range	T_j	-55 to 125	℃
Storage temperature	T_{stg}	-55 to 125	℃

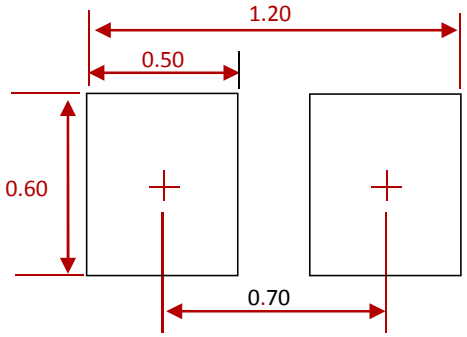
Note1:FR 4 PCB,minimum recommended pad layout.

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
NSR10404NX-MS	DFN1006	10000

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