SD1040

ROHS

Plastic-Encapsulate Schottky Barrier Diode

Features

- ◆ High Reliability
- ◆ Small Surface Mounting Type



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Mechanical Data

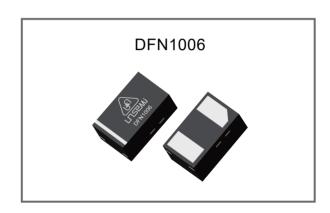
◆ Case: DFN1006

◆ Molding Compound Flammability Rating: UL 94V-O

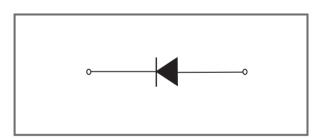
◆ Polarity: Color Band Denotes Cathode End

◆ Quantity Per Reel: 10,000pcs

◆ Device Marking: 14



Functional Diagram



Mechanical Characteristics

Parameter	Symbol	Value	Units
Repetitive Peak Reverse Voltage	VRRM	40	V
Reverse Voltage	VR	40	V
Positive Average Rectified Current	lF(AV)	1.0	А
Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	5.0	А
Power Dissipation	Pb	0.2	W
Thermal Resistance Junction to Ambient	$R_{_{ heta JA}}$	625	°C/W
Junction Temperature Range	TJ	-55~+150	°C
Storage Temperature Range	Tstg	-55~+125	°C



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Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Тур.	Max.	Unit
Reverse Voltage	VR	IR=1mA	40			V
Forward Voltage	VF ⁽¹⁾	IF=0.1A		0.33	0.38	V
		IF=0.2A		0.37	0.40	
		IF=0.5A		0.42	0.49	
		IF=0.7A		0.47	0.55	
		IF=1.0A		0.53	0.61	
Reverse Current	IR ⁽²⁾	VR=40V		9.0	20.0	μΑ

Notes:

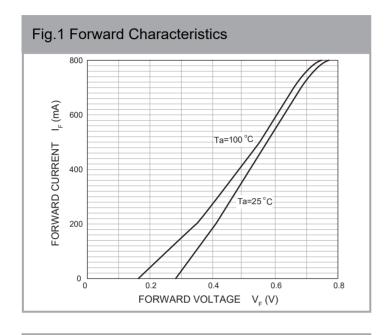
(1)Pulse test tp= $380\mu s$, $\delta < 2\%$; (2)Pulse test tp=5ms, $\delta < 2\%$.

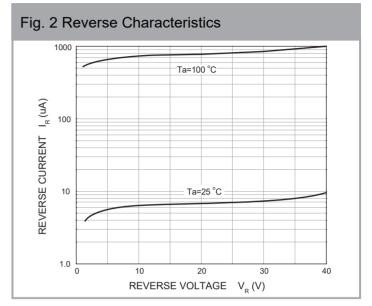


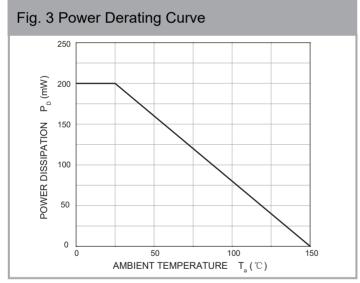
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Electrical Characteristics Curves





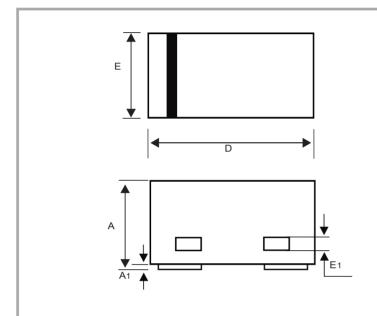


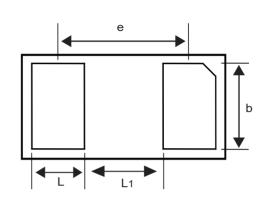


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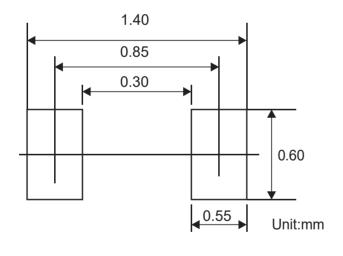
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DFN1006 Package Outline & Dimensions





Suggested PAD Layout



Symbol	Millimeters				
	Min.	Nom	Max.		
Α	0.450	0.500	0.550		
A1	0	0.020	0.050		
E1	0.013	0.063	0.113		
D	0.900	1.000	1.100		
Е	0.500	0.600	0.700		
е	0.65BSC				
L	0.150	0.250	3.50		
b	0.400	0.500	0.600		
L1	0.300	0.400	0.500		

For technical questions, contact: tech@unsemi.com.tw



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