

# Preliminary SS053D

## SWITCHMODE SCHOTTKY RECTIFIER

LCD Backlighting is Portable Devices

Digital Cameras and Camcorders

Mobile Phones and accessories

Notebooks, Electronic Books

GPS

### Features

- Ultra low VF - 420mV @ 500mA
- Ultra low VF - 360mV @ 300mA
- Low reverse current losses
- Negligible switching losses
- Extremely fast switching
- Meets MSL level 1, per J-STD-020

Solder dip 260 °C max. 10 s, per JESD 22-A111

- RoHS compliant package

### Mechanical Data

Case:

DFN 0805 case

Packed with FRP substrate and epoxy under filled

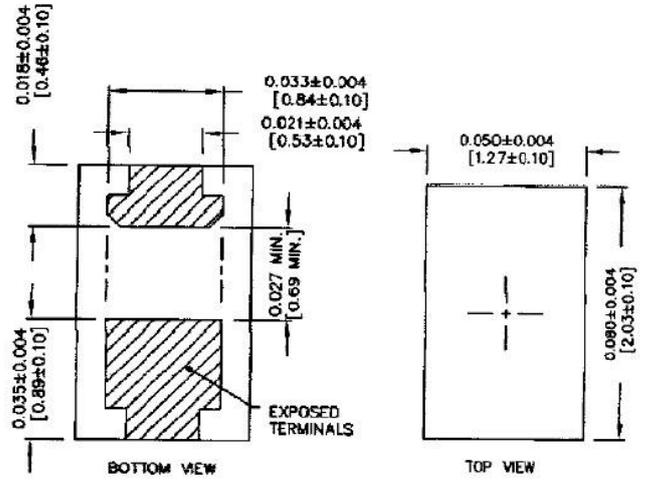
Molding compound meets UL 94 V-0 flammability

**Weight: DFN 0805: 0.016 gram**

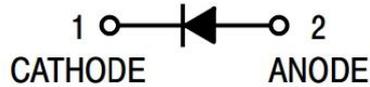
### Packing & Order Information

3,000/Reel

### CASE: DFN-0805



### Graphic symbol



**RoHS**  
COMPLIANT

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#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

##### Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	SS053D	Unit
Maximum repetitive peak reverse voltage	VRRM	30	V
Working peak reverse voltage	VRWM	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IF(AV)	0.5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	10	A
IAS = 2 A per diode			
Operating junction temperature range	TJ	-50 to +125	°C
Storage temperature range	TSTG	-50 to +150	°C

##### Notes:

Mounted on 2" Square PC Board with 1" Square Total Pad Size, PC Board FR4.

##### Electrical characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage at IF=0.3A, Tj=25°C at IF=0.5A, Tj=25°C	VF	0.36	0.45	V
		0.42		
Maximum reverse current per leg Tj=25°C	IR	20	100	u'A
at working peak reverse voltage Tj=125°C		20		m'A

##### Thermal characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	RθJL	15	°C/W
	Rthja	80	

##### Notes:

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms

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