

Green Products

## SDURB1060 ULTRAFAST PLASTIC RECTIFIER

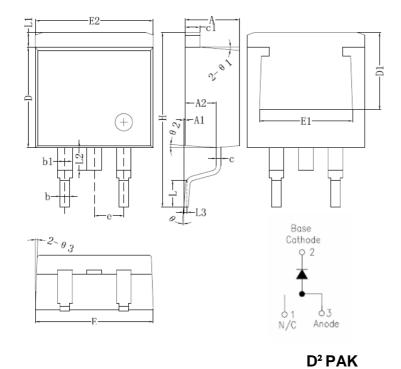
#### **Applications:**

- · Antiparallel diode for high frequency switching devices
- Anti saturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits
- Rectifiers in switch mode power supplies (SMPS)
- · Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders

#### Features:

- Fully Molded Isolation
- Dual Diodes-Anode Common
- Ultra-Fast Recovery
- Low Forward Voltage Drop
- High Surge Capability
- 200 Volts thru 600 Volts Types Available
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

#### Mechanical Dimensions: In mm /Inches



Symbol	Dimensions in			
	millimeters			
	Min. Typical		Max.	
Α	4.55	4.70	4.85	
A1	0	0.10	0.25	
A2	2.59	2.69	2.89	
b	0.71	0.81	0.96	
b1		1.27		
С	0.36	0.38	0.61	
c1	1.17	1.27	1.37	
D	8.55	8.70	8.85	
D1	6.40			
Е	10.01	10.16	10.31	
E1	7.6			
E2	9.98	10.08	10.18	
е		2.54		
Н	14.6	15.1	15.6	
L	2.00	2.30	2.70	
L1	1.17	1.27	1.40	
L2			2.20	
L3		0.25BSC		
е	0	-	8°	
e1		5°		
e2		4°		
e3		4°		

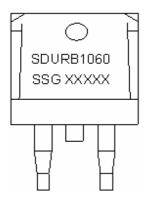
<sup>•</sup> Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 •

<sup>•</sup> FAX (86) 25-87123900 • World Wide Web Site - http://www.smc-diodes.com • E-Mail Address - sales@ smc-diodes.com •



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## **Marking Diagram:**



Where XXXXX is YYWWL

SDUR = Device Type B = Package type

10 = Forward Current (10A) 60 = Reverse Voltage (600V)

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

## **Ordering Information:**

Device	Package	Shipping
SDURB1060	D <sup>2</sup> PAK	800pcs/ reel
	(Pb-Free)	800pcs/ reer

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

## **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	600	V
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle @TC =100°C rectangular wave form	10	А
Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	100	Α

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#### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	$V_{F1}$	@ 10A, Pulse, T <sub>J</sub> = 25℃	2.2	V
	$V_{F2}$	@ 10 A, Pulse, T <sub>J</sub> = 100°C	2.0	V
Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = rated VR	10	μΑ
		T <sub>J</sub> = 25℃		
	$I_{R2}$	@V <sub>R</sub> = rated VR	500	μΑ
		T <sub>J</sub> = 125℃		
Reverse Recovery Time	t <sub>rr</sub>	$I_F=500$ mA, $I_R=1$ A,and $I_{rm}=250$ mA	32	ns

<sup>\*</sup> Pulse width  $< 300 \mu s$ , duty cycle < 2%

# **Thermal-Mechanical Specifications:**

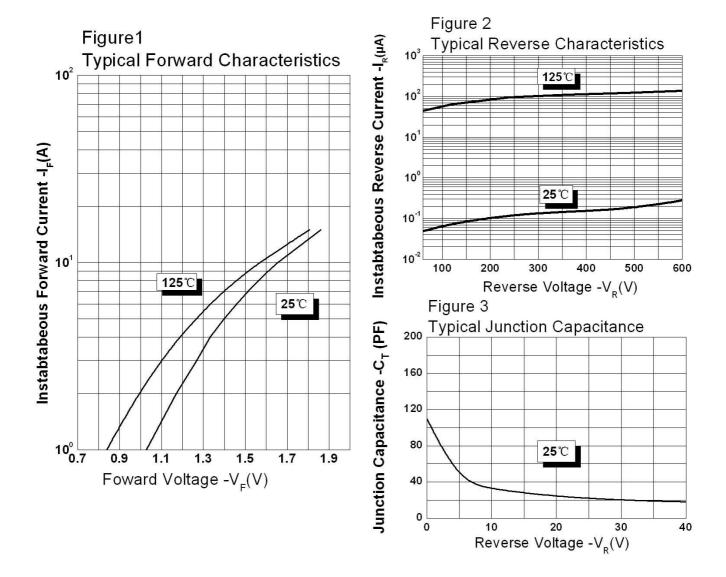
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	$T_J$	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Maximum Thermal	$R_{\theta JC}$	DC operation	6.0	°C/W
Resistance Junction to Case		-		
Approximate Weight	wt	-	1.85	g
Case Style		D <sup>2</sup> PAK		

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