

Green Products

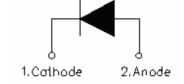
SDURF1020 ULTRAFAST PLASTIC RECTIFIER

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:

- Utra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- · Additional testing can be offered upon request



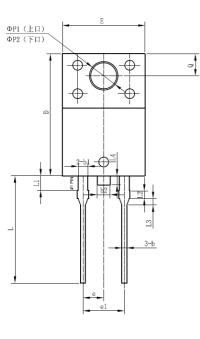
TYP.

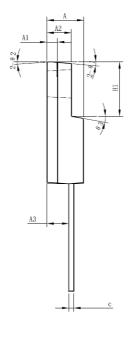
4.50

MAX.

4.70

Mechanical Dimensions: In mm





, · · · · · · · · · · · · · · · · · · ·	1.00	1.00	1.70
A1	1.10	1.30	1.50
A2	2.80	3.00	3.20
A3	2.50	2.70	2.90
A1 A2 A3 b	0.50	0.60	3.20 2.90 0.75
b1	1.10	1.30 3.00 2.70 0.60 1.20	1.35
b2	1.50	1.60	1.75
С	0.55	0.60	0.75
C D E e	14.80	15.00	15.20
E	9.96	10.16	10.36
е	-	2.55 5.10 6.70	-
e1	-	5.10	-
e1 H1 L	6.50	6.70	6.90
L	12.70	13.20	13.70
L1	1.60	1.80	2.00
L2	0.80	1.80 1.00 0.80	2.00 1.20 1.00
L3	0.60	0.80	1.00
L4	-	1.10	1.50
L1 L2 L3 L4 ФР1(上口)	3.30	1.10 3.50	3.70
I ΦP2(ト□)	2.99	3.19	3.39
Q	2.50	3.19 2.70	2.90
Q Θ1 Θ2		5°	
Θ2		4°	
<u>⊝3</u> ⊝4		10°	
Θ4		5°	
O5		E°	1

MIN.

4.30

SYMBOL

2	0 4	
	фа	
9	0.5	

ITO-220AC(HD)

- Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 •
- FAX (86) 25-87123900 World Wide Web Site http://www.sangdest.com.cn E-Mail Address sales@ sangdest.com.cn •



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Marking Diagram:



Where XXXXX is YYWWL

SDUR = Device Type F = Package type

10 = Forward Current (10A) 20 = Reverse Voltage (200V)

SSG = SSG YY = Year WW = Week L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

Device	Package	
SDURF1020	ITO-220AC	FOrce / tube
SDURF 1020	(Pb-Free)	50pcs / tube

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}	-	200	V
Max. Average Forward	I _{F(AV)}	50% duty cycle @TC =75°C rectangular wave form	10	А
Max. Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine pulse	125	А

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Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F}	@10A, Pulse, T _J = 25°C	1.15	V
Max. Reverse Current*	I _R	$@V_R = \text{rated } V_R$	15	μA
		$T_J = 25^{\circ}C$		
Junction Capacitance	C _T	BAIS=5V, 1MHZ	60	PF
Max. Reverse Recovery Time	t _{rr}	I _F =500mA, I _R =1A,and I _{rm} =250mA	35	ns

^{*} Pulse Width < 300µs, Duty Cycle <2%

Thermal-Mechanical Specifications:

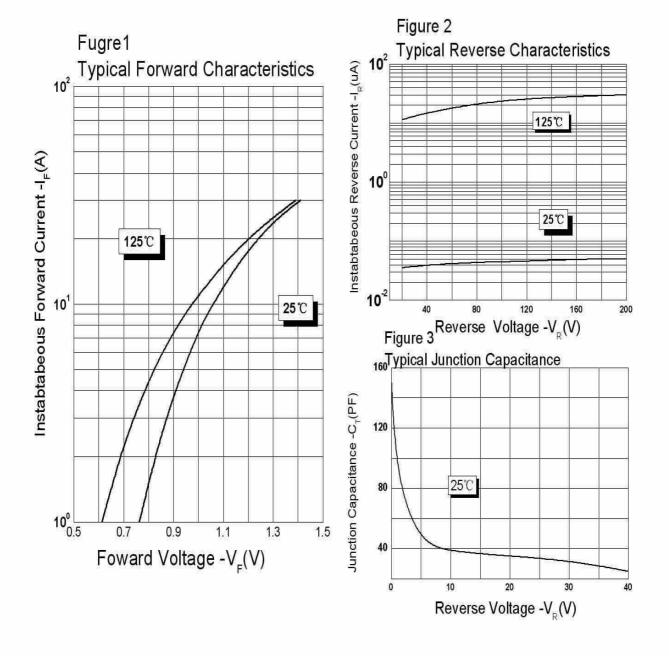
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	$^{\circ}$
Max. Storage Temperature	T _{stg}	-	-55 to +150	$^{\circ}$ C
Maximum Thermal	$R_{\theta JC}$	DC operation	1.6	°C/W
Resistance Junction to Case				
Approximate Weight	wt	-	1.6	g
Case Style		ITO-220AC		

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