Technical Data Data Sheet N0228, Rev. - Green Products

SDURF1060CTA(CTRA) ULTRAFAST PLASTIC RECTIFIER

Applications:

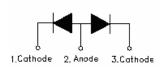
- Antiparallel diode for high frequency switching devices
- Anti saturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits
- Rectifiers in switch mode power supplies (SMPS)
- Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners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

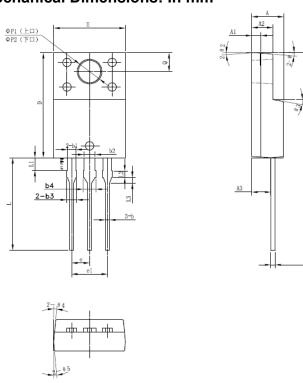


SDURF1060CTA



SDURF1060CTRA

Mechanical Dimensions: In mm



SYMBOL	MIN. TYP.		MAX.	
Α	4.30	4.50	4.70	
A1	1 10	1.30	1.50	
A2 A3 b	2.80	3.00	3.20	
A3	2.50	2.70	2.90 0.75	
b	0.50	0.60	0.75	
b1	1.10	1.20	1.35	
b2	2.80 2.50 0.50 1.10 1.50	3.00 2.70 0.60 1.20 1.60	1.35 1.75	
b3	1.20	1.30	1.45	
b4	1.60	1.70	1.85	
С	0.55	0.60	0.75	
C D E	14.80	15.00 10.16	15.20	
E	9.96	10.16	10.36	
е		2.55		
e1		5.10		
H1	6.50	6.70	6.90	
L L1	12.70	2.55 5.10 6.70 13.20 1.80 1.00	13.70	
L1	1.60	1.80	2.00	
L2	0.80	1.00	1.20	
L3	0.60	0.80	1.00	
ΦP1(上口)	3.30	3.50	2.00 1.20 1.00 3.70	
ΦP2 (下口)	2.99	3.19 2.70	3.39	
Q	2.50	2.70	2.90	
Θ1		5°		
Θ2		4° 10°		
Θ3		10°		
Θ4		5°		
Θ5		5°		

TVD

CVMDOL

ITO-220AB

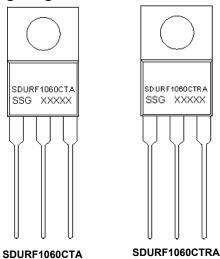
- Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 ☐ (86) 25-87123907 •
- FAX (86) 25-87123900 World Wide Web Site http://www.sangdest.com.cn E-Mail Address sales@ sangdest.com.cn •



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Marking Diagram:



Where XXXXX is YYWWL

SDUR = Device Type F = Package Type

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

CTA/CTRA = Configuration

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

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
CDUDE40C0CTA/CTDA	ITO-220AB	FOres / tube
SDURF1060CTA/CTRA	(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}	-	600	V
Max. Average Forward	I _{F (AV)}	50% duty cycle @Tc=100°C, rectangular wave form	10	А
Max. Peak One Cycle Non- Repetitive Surge Current (Per leg)	I _{FSM}	8.3ms, Half Sine pulse	80	А

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Electrical Characteristics:

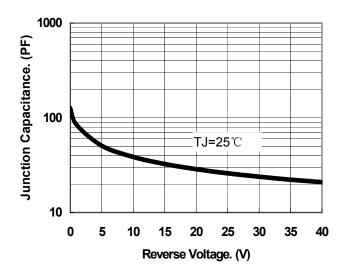
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 5A, Pulse, T _J = 25°C	2.0	V
Max. Reverse Current*	I _{R1}	$@V_R = \text{rated } V_R$ $T_J = 25^{\circ}C$	5	μA
	I _{R2}	$@V_R = \text{rated } V_R$ $T_J = 125^{\circ}C$	500	μA
Max. Reverse Recovery Time	t _{rr}	I_F =500mA, I_R =1A,and I_m =250mA	35	ns

 $^{^{\}star}\,$ Pulse width < 300 $\mu s,\,$ duty cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	°C
Max. Storage Temperature	T_{stg}	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	5.0	°C/W
Approximate Weight	wt	-	2.24	g
Case Style	ITO-220AB			

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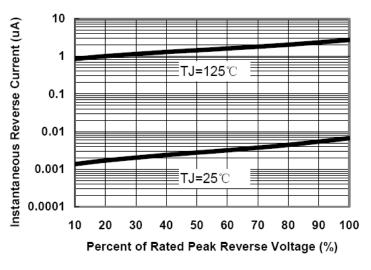


Fig.1-Typical Junction Capacitance

Fig.2-Typical Reverse Characteristics

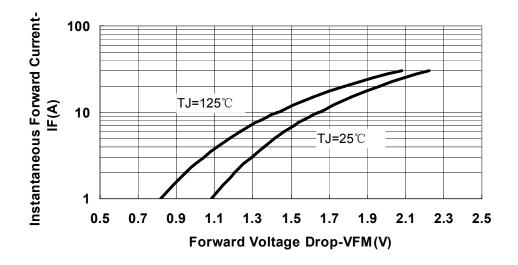


Fig.3-Typical Instantaneous Forward Voltage Characteristics

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