

Technical Data Data Sheet N0413, Rev. - **Green Products**

SDURF3060CT ULTRAFAST PLASTIC RECTIFIER

Applications:

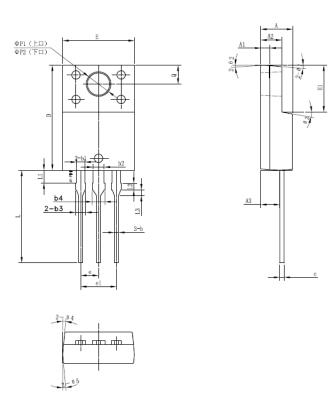
- Antiparallel diode for high frequency switching devices
- Anti saturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits
- Rectifiers in switch mode power supplies (SMPS)
- Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners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

Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- 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



SYMBOL	MIN.	TYP.	MAX.
Α	4.30	4.50	4.70
A1	1.10	1.30	1.50
A2	2.80	3.00	3.20
A3	2.50	2.70	2.90
b	2.80 2.50 0.50	3.00 2.70 0.60	0.75
b1	1.10	1.20	1.35
b2	1.50	1.60	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	15.20
Е	9.96	10.16	10.36
е		2.55	
e1		5.10	
H1	6.50	6.70	6.90
L	12.70	13.20	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	3.70
ΦP2(下口)	2.99	3.19	3.39
Q	2.50	3.19 2.70	2.90
Θ1		5°	
Θ2		4°	
Θ3		10°	
Θ4		5°	
Θ5		5°	

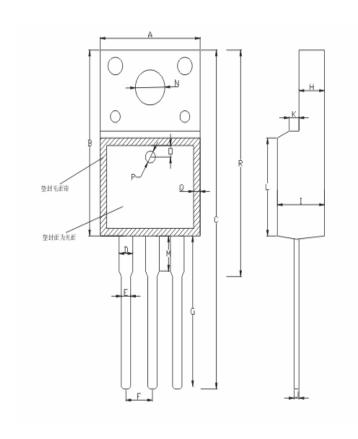
OPTION 1

[•] 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 •



Technical Data Data Sheet N0413, Rev. - **Green Products**



A:10.20	± 0.50	B:15.90	±0.50	C:29.00	±1.00	D:1.24	± 0.10
E:0.80	± 0.10	F:2.54	±0.10	G:13.10	$\pm 1,0$	H:2.55	± 0.05
I:4.70	± 0.05	J:0.50	± 0.05	K:1.20	± 0.20	L:8.00	± 0.50
M:3.00	± 0.50	N:3.20	± 0.20	O:1,25	±0.05	P:1.5	± 0.05
Q:1.0	±0.20	R:19.2	±1.0				

OPTION 2(SR)

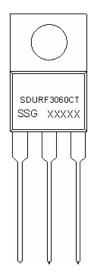
ITO-220AB



SDURF3060CT

Technical Data Data Sheet N0413, Rev. - **Green Products**

Marking Diagram:



Where XXXXX is YYWWL

SDUR = Device Type F = Package type

30 = Forward Current (30A) 60 = Reverse Voltage (600V)

CT = Configuration

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

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
SDURF3060CT	ITO-220AB (Pb-Free)	50 pcs/ 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
Average Rectified Forward Current (total device)	I _{F (AV)}	Rated Vr ,@Tc=105°C	30	Α
Max. Peak One Cycle Non- Repetitive Surge Current (Per leg)	I _{FSM}	8.3ms, Half Sine pulse	110	А

[•] Weigi 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 •



SDURF3060CT

Technical Data Data Sheet N0413, Rev. - **Green Products**

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage	V_{F1}	@ 15A, Pulse, T _J = 25°C	2.03	V
Drop(Per leg)*	V_{F2}	@ 15A, Pulse, T _J = 125°C	1.34	V
Max. Reverse Current*	I _{R1}	$@V_R = \text{rated } V_R$ $T_J = 25^{\circ}C$	100	μA
	I _{R2}	$@V_R = \text{rated } V_R$ $T_J = 125^{\circ}C$	500	uA
Max. Reverse Recovery Time	t _{rr}	I _F =500mA,I _R =1A,and I _{rm} =250mA	50	ns

^{*} Pulse width < 300 μ s, duty cycle < 2%

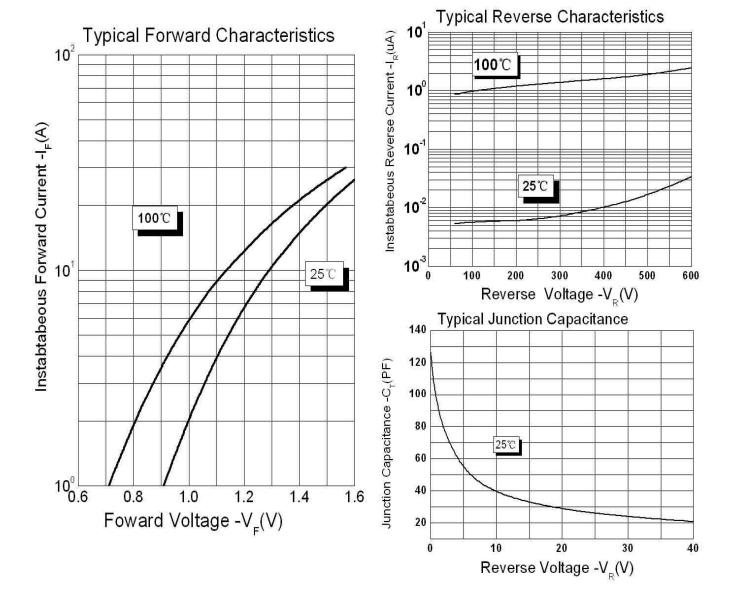
Thermal-Mechanical Specifications:

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	$R_{ heta JC}$	DC operation	1.6	°C/W
Approximate Weight	wt	-	2	g
Case Style		ITO-220AB		





Technical Data Data Sheet N0413, Rev. - **Green Products**



[•] 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 •



SDURF3060CT

Technical Data Data Sheet N0413, Rev. - **Green Products**

DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- . 4- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..

[•] FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •