

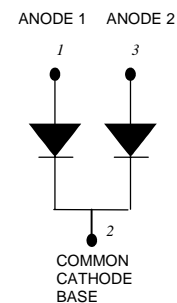
## SDUR3060PT ULTRAFAST PLASTIC RECTIFIER

### Applications:

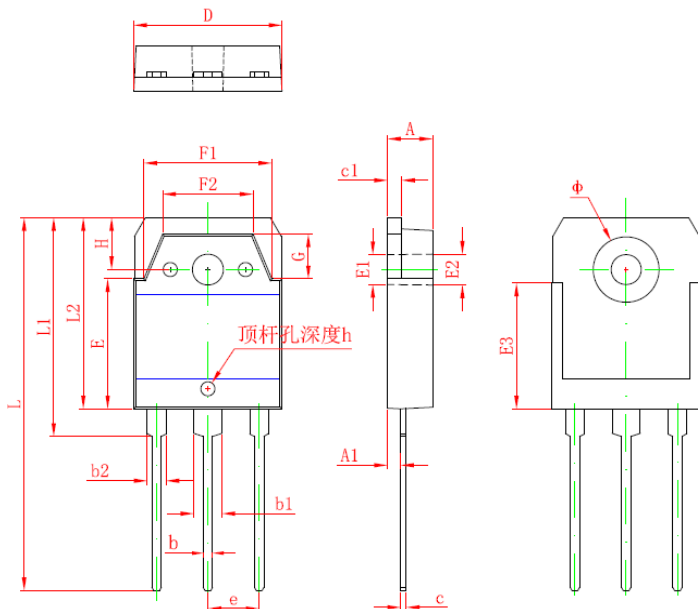
- Antiparallel diode for high frequency switching devices
- Anti saturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits
- Rectifiers in switch mode power supplies (SMPS)
- Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners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

### Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- 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



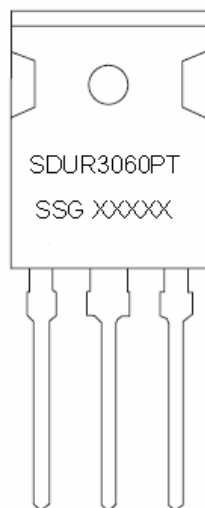
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.600	5.000	0.181	0.197
A1	1.200	1.600	0.047	0.063
b	0.800	1.200	0.031	0.047
b1	2.800	3.200	0.110	0.126
b2	1.800	2.200	0.071	0.087
c	0.500	0.700	0.020	0.028
c1	1.450	1.650	0.057	0.065
D	15.450	15.850	0.608	0.624
E	13.700	14.100	0.539	0.555
E1	3.200 REF		0.126 REF	
E2	3.300 REF		0.130 REF	
E3	13.450 REF		0.530 REF	
F1	13.400	13.800	0.528	0.543
F2	9.400	9.800	0.370	0.386
L	39.900	40.300	1.571	1.587
L1	23.200	23.600	0.913	0.929
L2	20.300	20.600	0.799	0.811
Phi	6.900	7.100	0.272	0.280
G	5.150	5.550	0.203	0.219
e	5.450 TYP		0.215 TYP	
H	5.000 REF		0.197 REF	
h	0.000	0.300	0.000	0.012

### TO-3P

Technical Data  
Data Sheet N1072, Rev. -

*Green Products*

**Marking Diagram:**



Where XXXXX is YYWWL

SDUR = Device Type  
30 = Forward Current (30A)  
60 = Reverse Voltage (600V)  
PT = Configuration  
SSG = SSG  
YY = Year  
WW = Week  
L = Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**Ordering Information:**

Device	Package	Shipping
SDUR3060PT	TO-3P (Pb-Free)	30 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	$I_{F(AV)}$	Rated $V_r$ , @ $T_c=110^\circ\text{C}$	30	A
Max. Peak One Cycle Non-Repetitive Surge Current (Per leg)	$I_{FSM}$	$T_J = 45^\circ\text{C}$ , $t=10\text{ms}$ , 50Hz, Sine	150	A

**Technical Data**  
**Data Sheet N1072, Rev. -**
**Green Products**
**Electrical Characteristics:**

Characteristics	Symbol	Condition	Min.	Typ.	Max.	Units
Max. Forward Voltage Drop* (Per leg)	$V_{F1}$	@ 15A, Pulse, $T_J = 25^\circ\text{C}$	-	1.3	1.8	V
	$V_{F1}$	@ 15A, Pulse, $T_J = 125^\circ\text{C}$	-	1.1	-	V
Max. Reverse Current*	$I_{R1}$	@ $V_R = \text{rated } V_R$ $T_J = 25^\circ\text{C}$	-	-	10	$\mu\text{A}$
	$I_{R1}$	@ $V_R = \text{rated } V_R$ $T_J = 125^\circ\text{C}$	-	-	250	$\mu\text{A}$
Max. Reverse Recovery Time	$t_{rr}$	$I_F = 500\text{mA}, I_R = 1\text{A}, \text{ and } I_{m} = 250\text{mA}$	-	50	60	ns

\* Pulse width < 300  $\mu\text{s}$ , duty cycle < 2%

**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-55 to +150	$^\circ\text{C}$
Max. Storage Temperature	$T_{stg}$	-	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	1.1	$^\circ\text{C/W}$
Case Style	TO-3P			

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