

Technical Data Data Sheet N0386, Rev. - **Green Products**

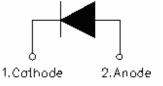
SDUR6060W ULTRAFAST PLASTIC RECTIFIER

Applications:

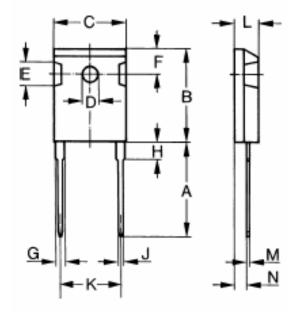
- Antiparallel diode for high frequency switching devices
- Anti saturation diode
- Snubber diode
- Free wheeling diode in converters and motor control circuits
- Rectifiers in switch mode power supplies (SMPS)
- Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners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



Mechanical Dimensions: In mm / Inches

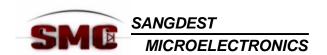


Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A		20.32	0.780	0.800
B		21.46	0.819	0.845
C	15.75	16.26	0.610	0.640
D	3.55	3.65	0.140	0.144
E	4.32	5.49	0.170	0.216
F	5.4	6.2	0.212	0.244
G H	1.65	2.13 4.5	0.065	0.084 0.177
J	1.0	1.4	0.040	0.055
K	10.8	11.0	0.426	0.433
L	4.7	5.3	0.185	0.209
M	0.4	0.8	0.016	0.031
N	2.2	2.54	0.087	0.102

TO-247AC

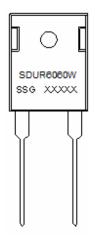
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Marking Diagram:



Where XXXXX is YYWWL

SDUR = Device Type

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

W = Configuration

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

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
SDUR6060W	TO-247AC (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 Vr ,@Tc=70°C	60	Α
Max. Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3ms, Half Sine pulse	600	А

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Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 60A, Pulse, T _J = 25°C	1.8	V
Max. Reverse Current*	I _{R1}	$@V_R = \text{rated } V_R$ $T_J = 25^{\circ}C$	100	uA
	I _{R1}	$@V_R = \text{rated } V_R$ $T_J = 125$ °C	14000	uA
Max. Reverse Recovery Time	t _{rr}	I _F =500mA,I _R =1A,and I _{rm} =250mA	50	ns

^{*} 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	$R_{ ext{ hetaJC}}$	DC operation	0.75	K/W
Approximate Weight	wt	-	6.7	g
Case Style		TO-247AC		



SDUR6060W

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