

Green Products

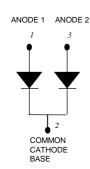
SDUR6030PT ULTRAFAST PLASTIC RECTIFIER

Applications:

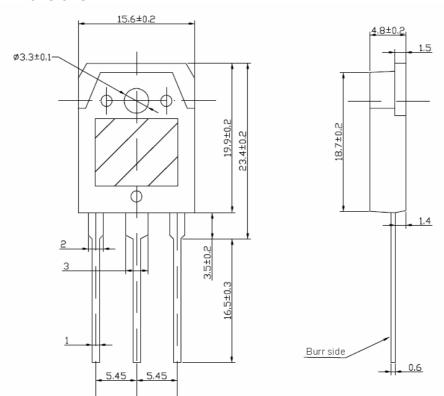
- Antiparallel diode for high frequency switching devices
- Anti saturation diode
- Snubber diode
- · Free wheeling diode in converters and motor control circuits
- · Rectifiers in switch mode power supplies (SMPS)
- · Inductive heating and melting
- Uninterruptible power supplies (UPS)
- Ultrasonic 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-O
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



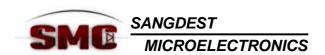
Mechanical Dimensions: In mm



Remark: Not specified the tolerance requirement $\pm\,0.10\text{mm}$ TO-3P

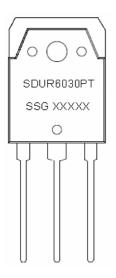
[•] Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 •

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Marking Diagram:



Where XXXXX is YYWWL

SDUR = Device Type

60 = Forward Current (60A) 30 = Reverse Voltage (300V)

PT = Configuration

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
SDUR6030PT	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}	-	300	V
Average Forward Current	I _{F (AV)}	50% duty cycle @Tc=100℃, rectangular wave form	60	А
Peak One Cycle Non- Repetitive Surge Current (Per leg)	I _{FSM}	8.3ms, Half Sine pulse	400	Α

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Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop(Per	V_{F1}	@ 30A, Pulse, T _J = 25°C	1.3	V
leg)*	V_{F2}	@ 30A, Pulse, T _J = 150°C	1.1	V
	I_{R1}	$@V_R = rated V_R$	5.0	μA
Reverse Current*		$T_J = 25^{\circ}C$		
	I _{R2}	$@V_R = rated V_R$	1.0	mΑ
		$T_J = 125$ °C		
Reverse Recovery Time	t _{rr1}	I_F =500mA, I_R =1A,and I_m =250mA	45	ns

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

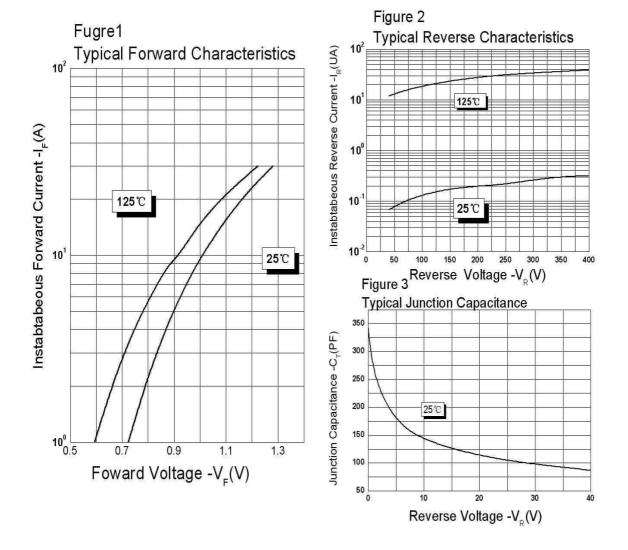
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	°C
Storage Temperature	T _{stg}	-	-55 to +150	°C
Maximum Thermal Resistance Junction to Case	$R_{ heta JC}$	DC operation	1.0	°C/W
Approximate Weight	wt	-	6.7	g
Case Style		TO-3P		·

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SDUR6030PT

Technical Data Data Sheet N1469, Rev. A

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