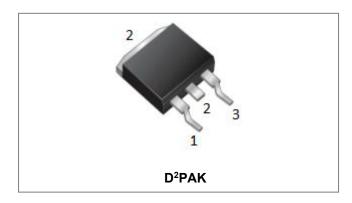






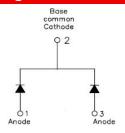
SDURB2060CT ULTRAFAST RECTIFIER



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

Circuit Diagram



Features

- Ultra-Fast switching
- · High current capability
- Low reverse leakage current
- High surge current capability
- "-A" is an AEC-Q101 qualified device
- This is a Pb free device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	-	600	V
Average Rectified Forward Current (Per Device)	I _{F (AV)}	50% duty cycle @Tc=105°C, rectangular wave form	10(Per Leg) 20(Per Device)	Α
Peak One Cycle Non-Repetitive Surge Current(Per Leg)	I _{FSM}	8.3ms, Half Sine pulse	100	Α

Electrical Characteristics:

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop(Per Leg)*	V_{F1}	@ 10A, Pulse, T _J = 25°C	1.33	2.2	V
	V_{F2}	@ 10A, Pulse, T _J = 100°C	1.27	2.0	V
Reverse Current(Per Leg)*	I _{R1}	@V _R = rated V _R , T _J = 25°C	0.3	10	μA
	I _{R2}	@V _R = rated V _R , T _J = 125°C	84	500	μA
Reverse Recovery Time(Per Leg)	t _{rr}	I _F =500mA, I _R =1A,and I _{rm} =250mA	43	50	ns

Pulse width < 300 μs, duty cycle < 2%

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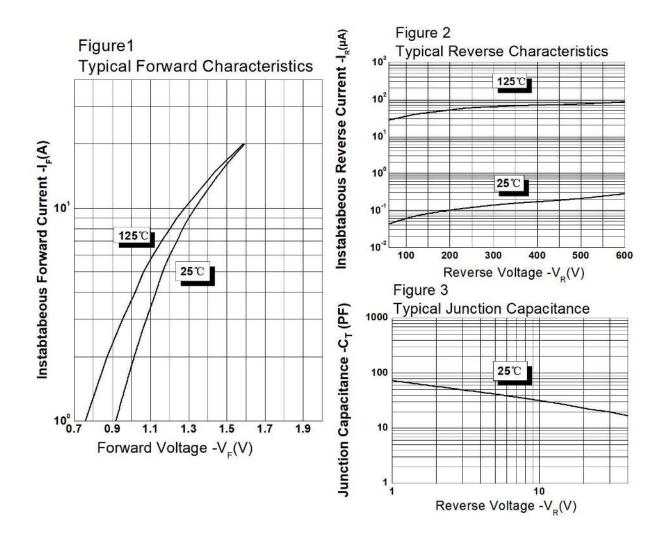




Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	°C
Storage Temperature	T_{stg}	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	R _θ Jc	DC operation	6.0	°C/W
Approximate Weight	wt	-	1.85	g
Case Style	D ² PAK			

Ratings and Characteristics Curves



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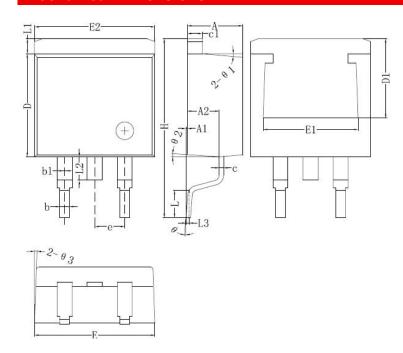








Mechanical Dimensions D²PAK



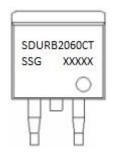
Symbol	Dimensions in millimeters			
Symbol	Min.	Typical	Max.	
Α	4.47	4.70	4.85	
A1	0	0.10	0.25	
A2	2.59	2.69	2.89	
b	0.71	0.81	0.96	
b1	1.17	1.27	1.37	
С	0.31	0.38	0.61	
c1	1.17	1.27	1.37	
D	8.50	8.70	8.90	
D1	6.40			
E	10.01	10.16	10.31	
E1	7.6			
E2	9.98	10.08	10.31	
е		2.54		
Н	14.6	15.1	15.6	
L	2.00	2.30	2.74	
L1	1.12	1.27	1.42	
L2	1.30		2.20	
L3		0.25BSC		
е	0	-	8°	
e1		5°		
e2		4°		
e3		4°		

Ordering Information

Device	Package	Shipping
SDURB2060CT	D ² PAK	800pcs / reel
SDURB2060CTTR	D ² PAK	800pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



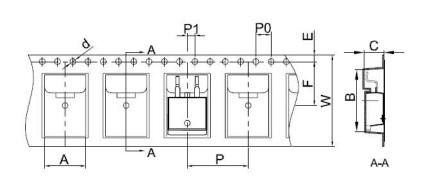
Where XXXXX is YYWWL

SDUR = Device Type
B = Package type
20 = Forward Current (20A)
60 = Reverse Voltage(600V)
CT = Configuration
SSG = SSG
YY = Year

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

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

Carrier Tape Specification D²PAK



SYMBOL	Millimeters		
STIVIBUL	Min.	Max.	
Α	10.70	10.90	
В	16.03	16.23	
С	5.11	5.31	
d	1.45	1.65	
E	1.65	1.85	
F	11.40	11.60	
P0	3.90	4.10	
Р	15.90	16.10	
P1	1.90	2.10	
W	23.90	24.30	

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