

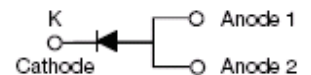
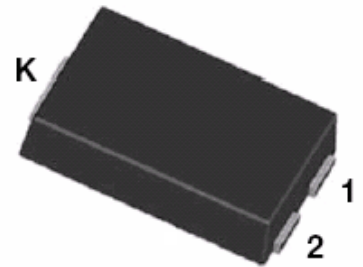
ST1060S SCHOTTKY RECTIFIER

Applications:

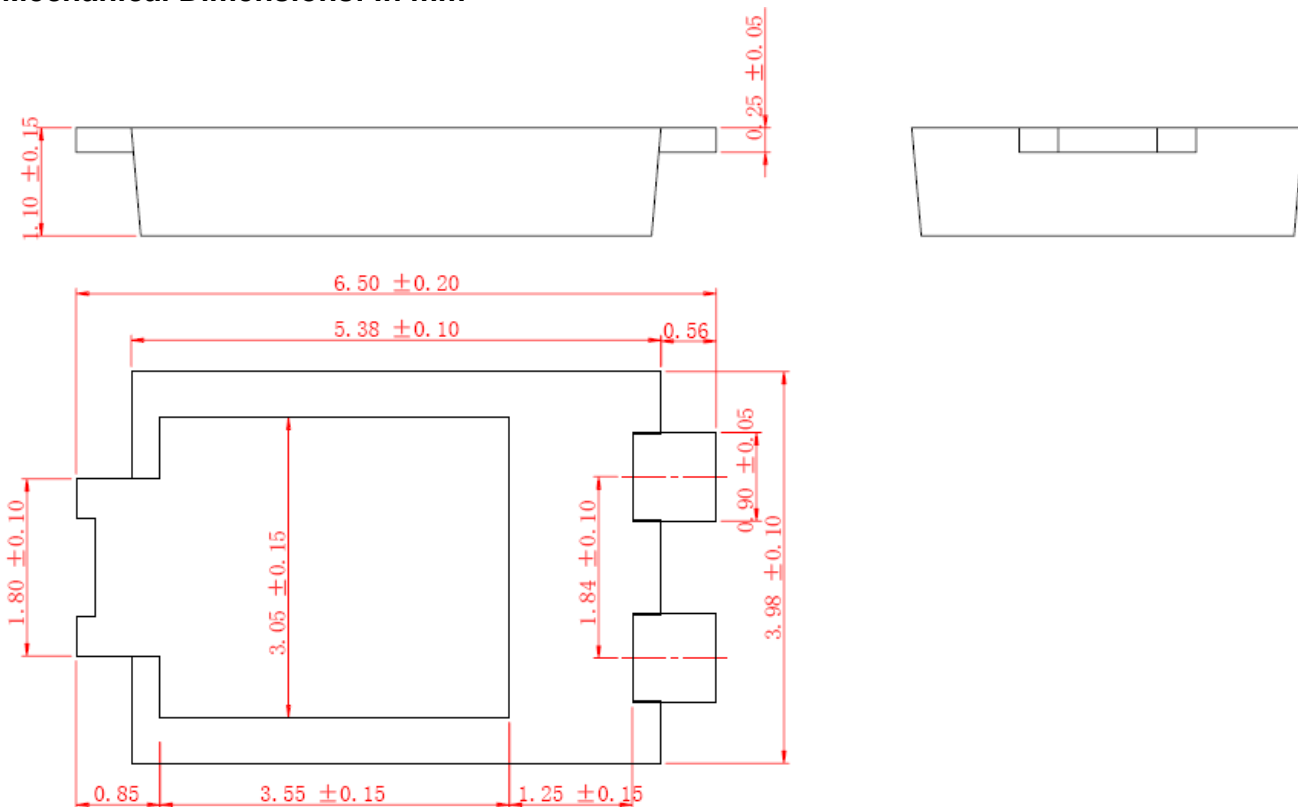
- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration

Features:

- Ultralow forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

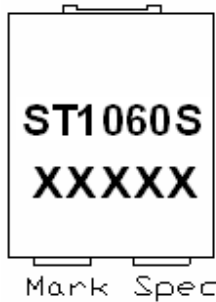


Mechanical Dimensions: In mm



TO-277B

Marking Diagram:



Where XXXXX is YYWWL

- ST = Ultralow VF
- 10 = Forward Current (10A)
- 60 = Reverse Voltage (60V)
- S = Device Type
- YY = Year
- WW = Week
- L = Lot Number

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

Ordering Information:

Device	Package	Shipping
ST1060S	TO-277B(Pb-Free)	5000pcs/ reel

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}	-	60	V
Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C=80^\circ C$, rectangular wave form	10	A
Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	275	A



Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop*	V _{F1}	@ 10A, Pulse, T _J = 25 °C	0.44	0.49	V
	V _{F2}	@ 10A, Pulse, T _J = 125 °C	0.42	-	V
Reverse Current*	I _{R1}	@V _R = rated V _R T _J = 25 °C	-	0.36	mA
	I _{R2}	@V _R = rated V _R T _J = 125°C	20	-	mA
Typical Junction Capacitance	C _j	@V _R = 4.0 V, T _C =25 °C f _{sig} = 1MHz	850	-	pF

* Pulse Width < 300µs, 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 Ambient (Note 2)	R _{θJA}	DC operation	110	°C/W
Maximum Thermal Resistance Junction to Case (Note 1)	R _{θJC}	DC operation	10	°C/W
Approximate Weight	wt	-	0.08	g
Case Style	TO-277B			

Notes: 1. Mounted on an FR4 PCB, single-sided copper, with 100cm² copper pad area.
2. Mounted on an FR4 PCB, single-sided copper, mini pad.

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