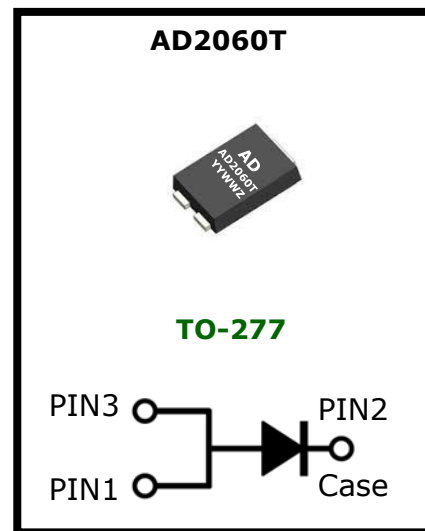


60V 20A Ultra Low VF Schottky

Characteristics Summary

Characteristics	Values	Units
IF(AV)	20	A
VRRM	60	V
VF @ 10A, TJ = 25°C	0.46	V, typ.
TJ, Operating Junction Temperature	-40 to +150	°C



Features

- Ultra Low Forward Voltage (VF) Drop Low Power Losses
- Low Leakage Current at high temperature.
- Reliable application for various circumstances.
- 150°C Operating Junction Temperature
- Lead Free Finish, RoHS Compliant

Typical Applications

Device optimized for low forward voltage drop to maximize efficiency in Power Supply applications, high frequency converters, freewheeling diodes.



Maximum Ratings Characteristics

(TA = 25°C unless otherwise specified)

Parameter	Symbol	Values	Units
DC Blocking Voltage	V _{RM}	60	V
Working Peak Reverse Voltage	V _{RWM}		V
Peak Repetitive Reverse Voltage	V _{RRM}		V
Average Rectified Forward Current (Rated VR-20Khz Square Wave) – 50% duty cycle	I _D	20	A
Peak Forward Surge Current – 1/2 60hz	I _{FSM}	100	A
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I _{RRM}	1	A
Typical Thermal Resistance	R _{θJC}	68	°C / W
Maximum Rate of Voltage Change (at Rated VR)	dv/dt	10000	V/uS
Operating Junction Temperature	T _J	-40 to +150	°C
Storage Junction Temperature	T _{STG}	-40 to +150	

Electrical Characteristics

(TA = 25°C unless otherwise specified)

Parameter	Test Conditions		Symbol	Typ.	Max.	Units
Instantaneous Forward Voltage	IF = 10 A	TJ = 25°C	VF*	0.46	0.48	V
	IF = 20 A			0.54	0.57	
	IF = 10 A	TJ = 125°C		0.38	0.42	
	IF = 20 A			0.52	0.56	
Instantaneous Reverse Current	VR = 60V	TJ = 25°C	IR*	15	40	uA
	VR = 60V	TJ = 125°C		----	25	mA
Junction Capacitance	VR = 5V, f = 1MHz		CJ	1120	----	pF
* Pulse width < 300 uS, Duty cycle < 2%						



Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise specified)

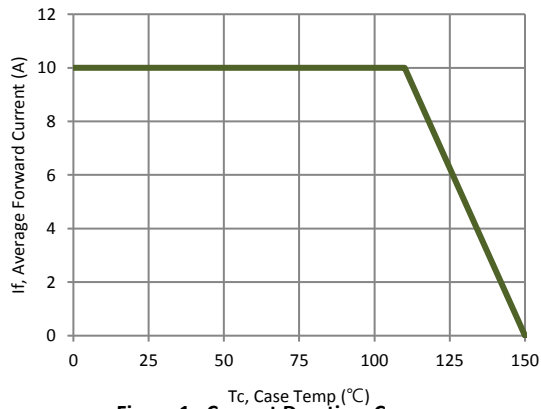


Figure 1 : Current Derating, Case

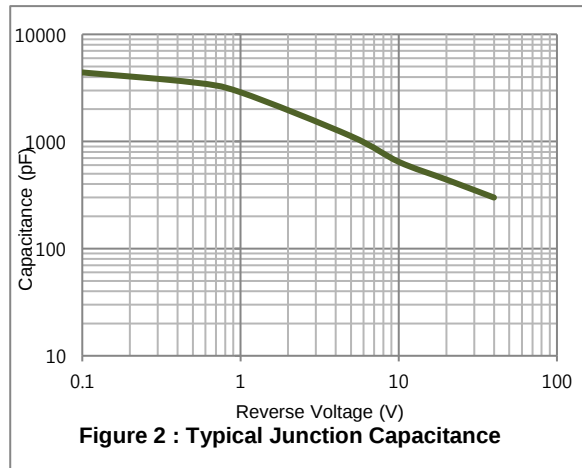


Figure 2 : Typical Junction Capacitance

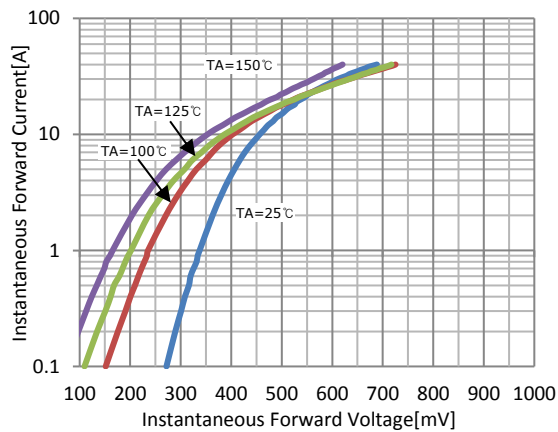


Figure 3 : Typical Forward Voltage

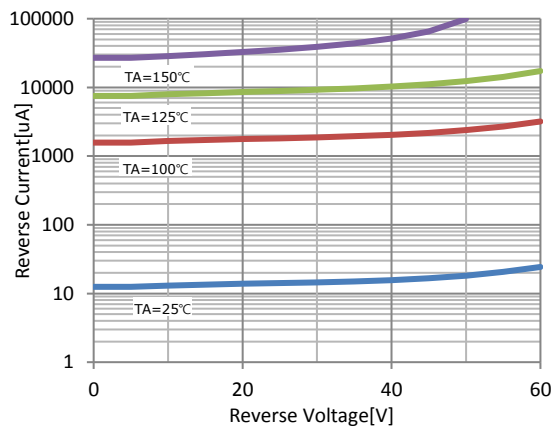


Figure 4 : Typical Reverse Current

Ordering Information

Part No	Package	Packing	Finish	Halogen	Packing Unit
AD2060T	TO-277	Tape & Reel	Sn	Free	2,500ea

Marking Layout



1ST Line : Company logo

2nd Line : Date code

- T : TO-277 PKG code
- R : TO-252 PKG code

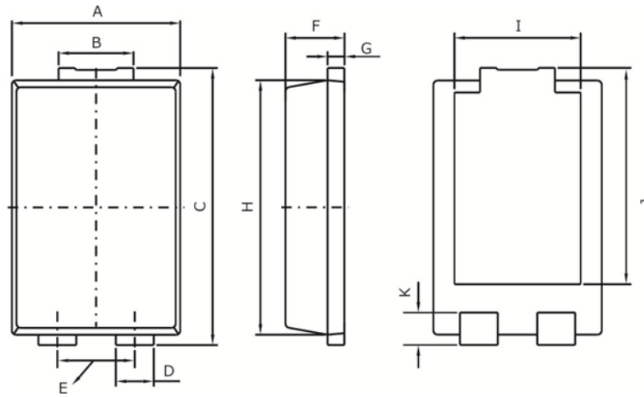
3rd Line : Device name + PKG CODE

- YY : Last two digit of calendar year
- WW : Work week calendar
- C : ASSEMBLY SITE



Package Dimensions

TO-277



Dim.	Min.	Max.
A	3.90	4.10
B	1.74	1.94
C	6.40	6.60
D	0.80	1.05
E	1.84 typ.	
F	1.00	1.20
G	0.35	0.45
H	5.30	5.45
I	3.05 typ.	
J	4.40 typ.	
K	0.60	0.95

All Dimensions in millimeter

Revision History

No	Date	Contents
0	2017-01-11	Initial Brief Datasheet Release
1	2019-01-11	Junction Capacitance Update

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