

## Schottky Barrier Rectifier

### General Description

The SDB360 surface mounted Schottky rectifier has been designed for applications requiring low forward drop and very small foot prints on PC boards. Typical applications are in disk drives, switching power supplies, converters, free-wheeling diodes, battery charging, and reverse battery protection.



SOD-106

### Features and Benefits

- Low forward drop voltage and low reverse leakage current
- Low power rectified
- “Green” device and RoHS compliant device
- Available in full lead (Pb)-free device



### Applications

- Portable equipment battery applications
- Switching mode power supplies applications

### Ordering Information

Part Number	Marking Code	Package	Packaging
SDB360	3A60	SOD-106	Tape & Reel

### Marking Information



3A60 = Specific Device Code

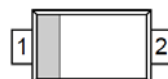
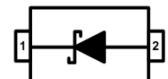
YWW = Year & Week Code Marking

-. Y = Year Code

-. WW = Week Code

■ = Color band denote cathode

### Pinning Information

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode		
2	Anode		

**Absolute Maximum Ratings** ( $T_{amb}=25^{\circ}\text{C}$ , Unless otherwise specified)

Characteristic	Symbol	Ratings	Unit
Peak reverse voltage	$V_{RM}$	60	V
Reverse voltage	$V_R$	60	
Forward current	$I_F$	3.0	A
Peak surge forward current (Non-repetitive 60Hz sine wave)	$I_{FSM}$	120	A
Junction temperature	$T_J$	150	$^{\circ}\text{C}$
Storage temperature range	$T_{stg}$	-55 ~ 150	

**Electrical Characteristics** ( $T_{amb}=25^{\circ}\text{C}$ , Unless otherwise specified)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$ <sup>1)</sup>	$I_F=3\text{A}$	-	-	0.65	V
Reverse current	$I_R$ <sup>2)</sup>	$V_R=60\text{V}$	-	-	0.35	mA
Thermal resistance	$R_{th(j-a)}$ <sup>3)</sup>	Junction to ambient	-	-	76	$^{\circ}\text{C}/\text{W}$
Total capacitance	$C_T$	$V_R=10\text{V}$ , $f=1\text{MHz}$	-	100	-	pF

<sup>1)</sup> Pulse test:  $t_P \leq 380\mu\text{s}$ , Duty cycle  $\leq 2\%$

<sup>2)</sup> Pulse test:  $t_P \leq 5\text{ms}$ , Duty cycle  $\leq 2\%$

<sup>3)</sup> Device mounted on glass epoxy PCB (recommanderable minimum solder land)

Rating and Characteristic Curves

Fig. 1  $I_F - V_F$

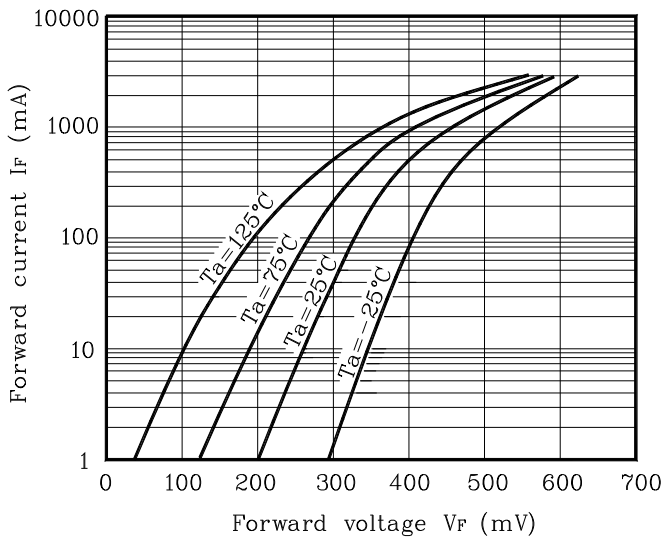


Fig. 2  $I_R - V_R$

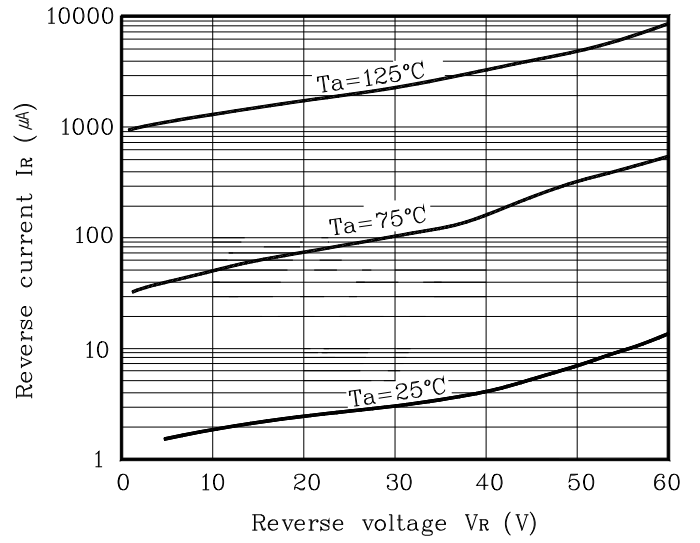
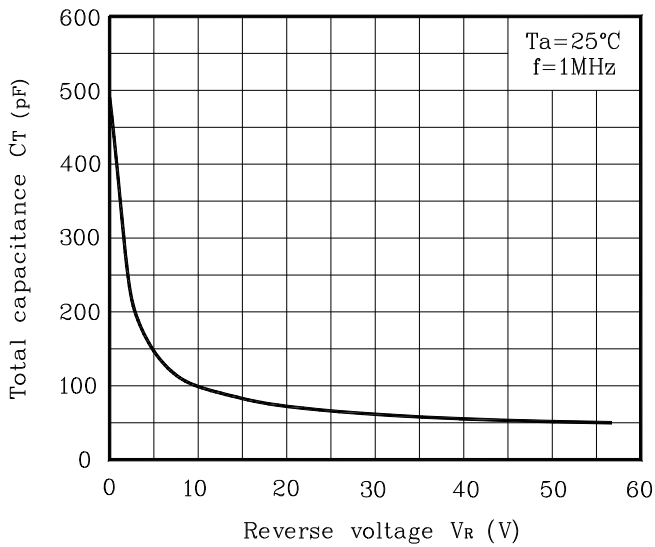
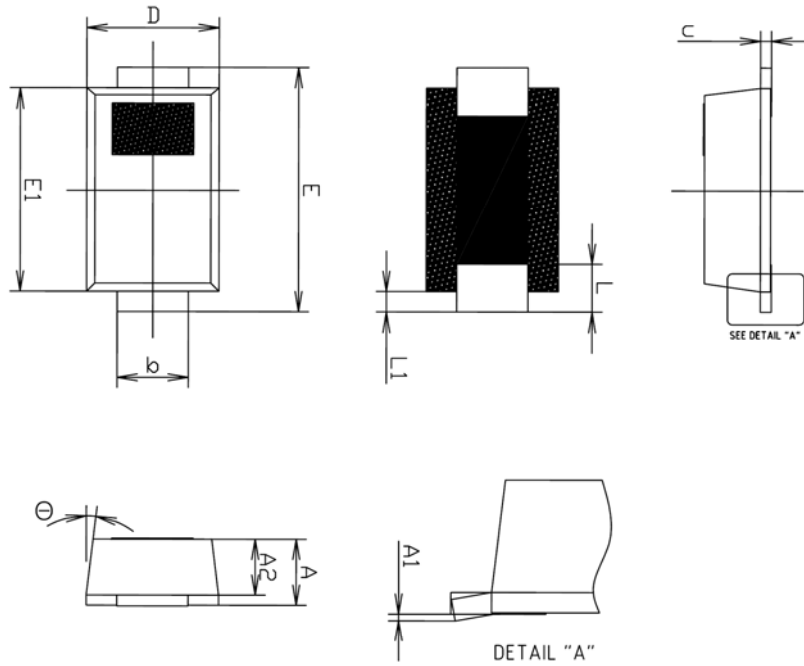


Fig. 3  $C_T - V_R$

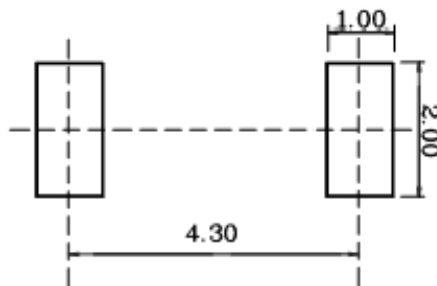


Package Outline Dimensions



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	1.25	1.30	1.35	
A1	0.00	—	0.10	
A2	1.05	1.10	1.15	
b	1.35	1.42	1.49	
c	0.17	0.22	0.27	
D	2.50	2.60	2.70	
E	4.60	4.80	5.00	
E1	3.90	4.00	4.10	
L	0.79	0.94	1.09	
L1	0.30	0.40	0.50	
$\ominus$	4°	—	10°	

※ Recommend PCB solder land (Unit: mm)



**The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).**

**Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..**

**Specifications mentioned in this publication are subject to change without notice.**