

Applications

- Switching mode power supply
- Converter & chopper

Features

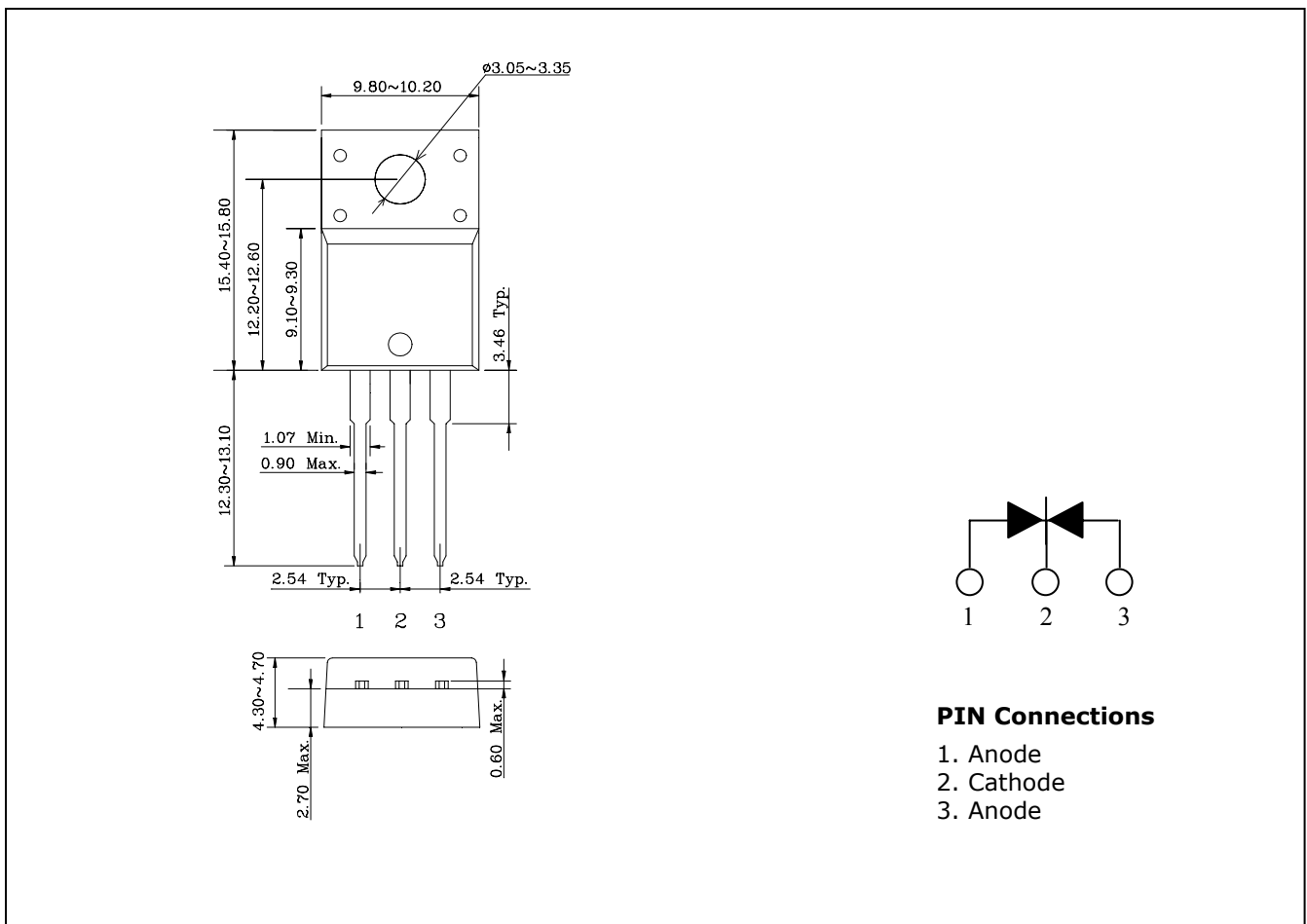
- Low forward voltage: $V_{FM}=0.65V$ Max.
- Low reverse current: $I_{RRM}=0.5mA$ Max.
- Low switching loss

Ordering Information

Type No.	Marking	Package Code
SDB1060PI	SDB1060PI	TO-220F-3L

Outline Dimensions

unit : mm



Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	60	V
Average rectified output current	I_O	10	A
Peak surge forward current (Non-repetitive 60Hz sine wave)	I_{FSM}	60	A
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Peak forward voltage	$V_{FM}^{1)}$	$I_{FM}=5A^{2)}$	-	-	0.65	V
Repetitive peak reverse current	$I_{RRM}^{1)}$	$V_{RRM}=60V^{2)}$	-	-	0.5	mA
Total capacitance	$C_T^{1)}$	$V_R=10V, f=1.0MHz$	-	160	-	pF
Thermal resistance	R_{th}	Junction to ambient	-	-	62.5	°C/W
		Junction to case	-	-	4	

1) Per each unit

2) Pulse test : $t_p \leq 380 \mu s$, Duty cycle $\leq 2\%$

Electrical Characteristic Curves (per each unit)

Fig. 1 $I_O - V_F$

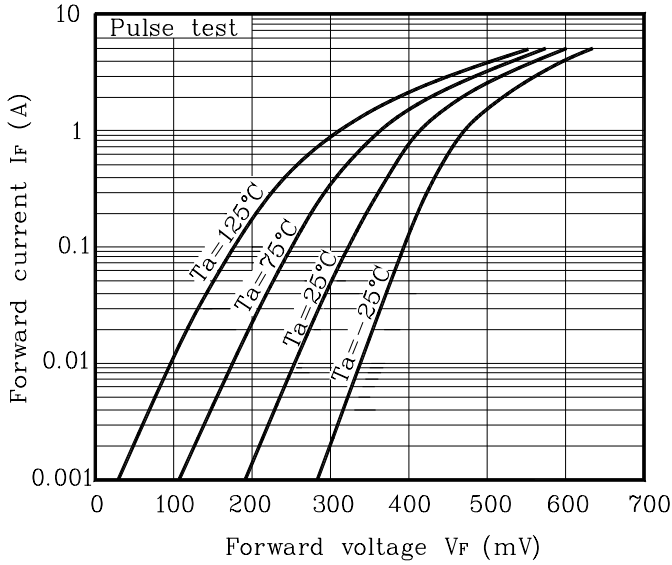


Fig. 2 $I_R - V_R$

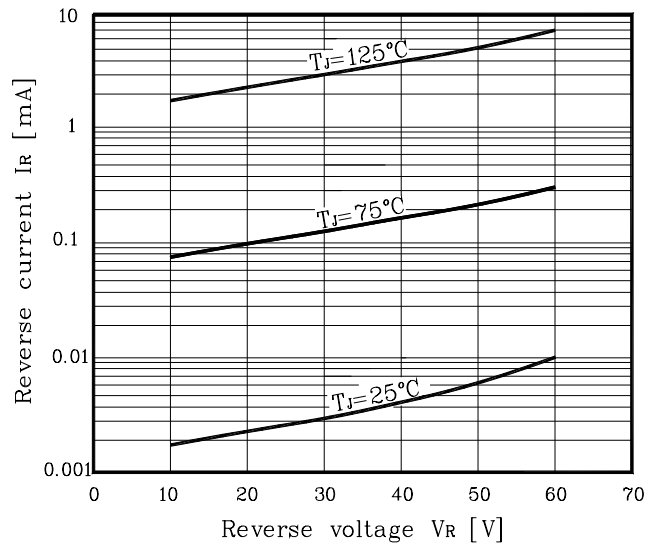


Fig. 3 $P_F - I_O$

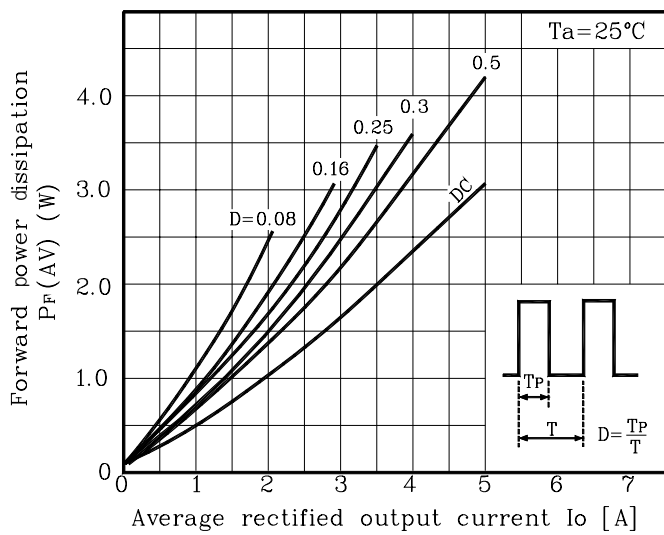


Fig. 4 $C_T - V_R$

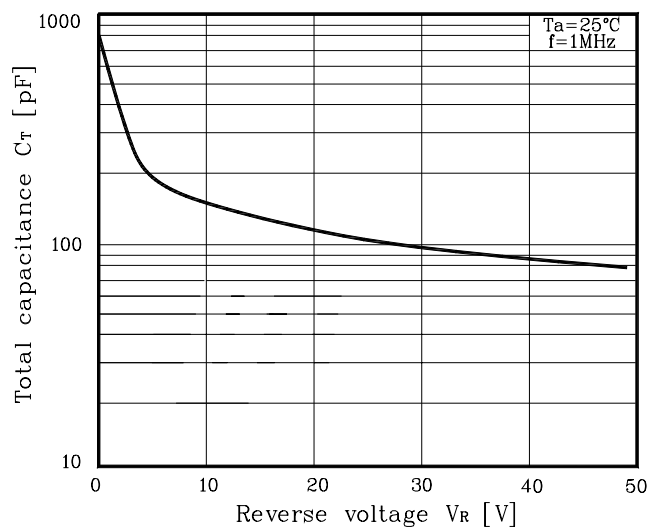


Fig. 5 $I_{FSM} - \text{Number of cycle}$

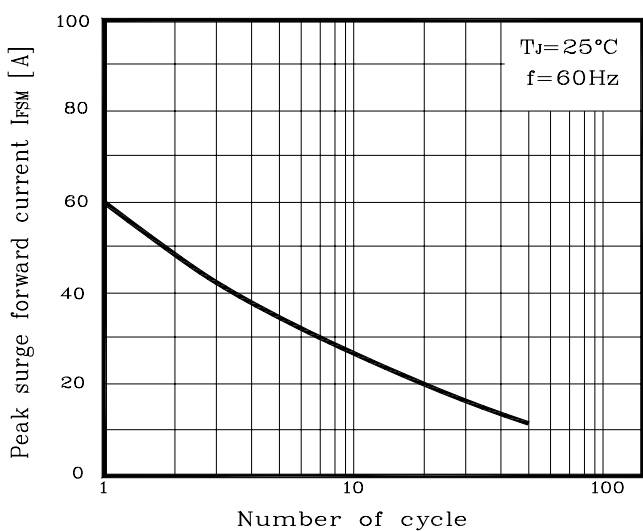
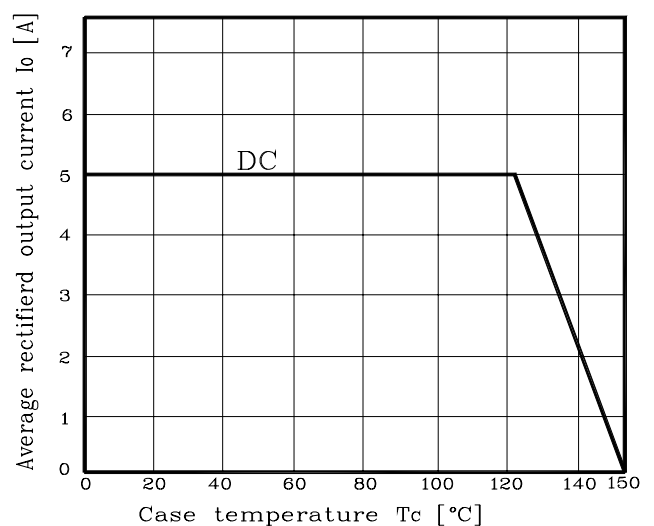


Fig. 6 $I_O \text{ derating} - T_C$



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.