AUK Semiconductor

SDB1040PH

Schottky Rectifier

Applications

- Switching mode power supply
- Converter & chopper

Features

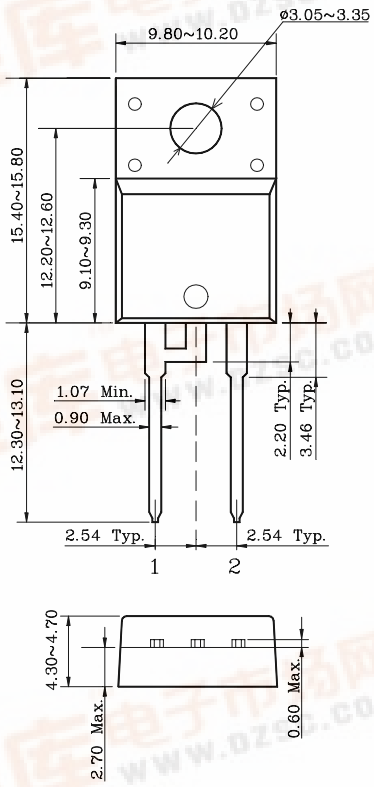
- Low forward voltage: V_{FM}=0.55V Max. @ I_F=10A
- Low reverse current: I_{RRM}=2mA Max. @ V_R=40V
- Low switching loss

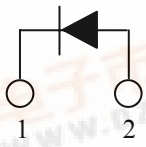
Ordering Information

Type No.	Marking	Package Code
SDB1040PH	SDB1040PH	TO-220F-2L

Outline Dimensions

unit : mm





PIN Connections

1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	40	V
Average rectified output current	I_O	10	A
Peak surge forward current (Non-repetitive 60Hz sine wave)	I_{FSM}	120	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}	I_F=10A [1)]	-	-	0.55	V
Repetitive peak reverse current	I_{RRM}	V_R=40V	-	-	2	mA
Total capacitance	C_T	V_R=10V, f=1.0MHz	-	600	-	pF
Thermal resistance	R_{th}	Junction to ambient	-	-	62.5	°C/W
		Junction to case	-	-	3.5	

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

Electrical Characteristic Curves

Fig. 1 I_O - V_F

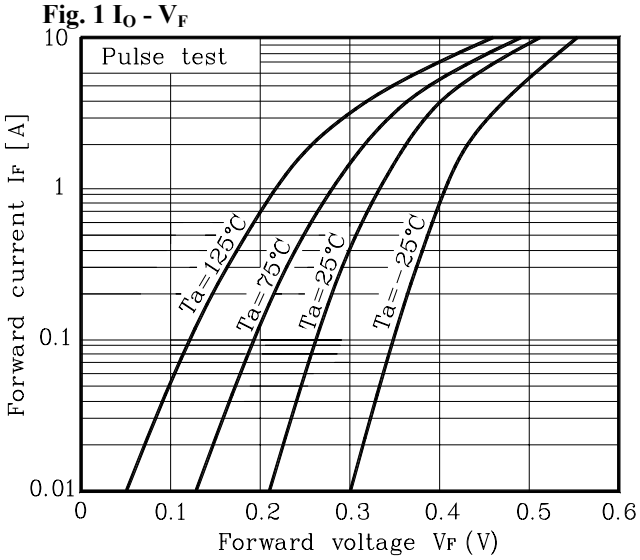


Fig. 2 I_R - V_R

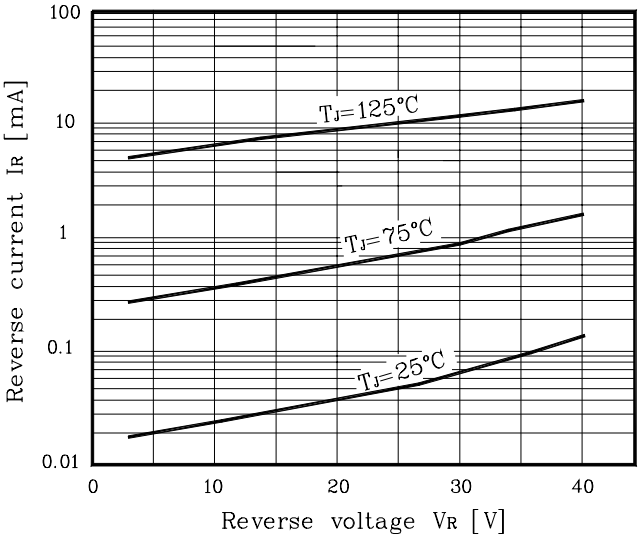


Fig. 3 P_F - I_O

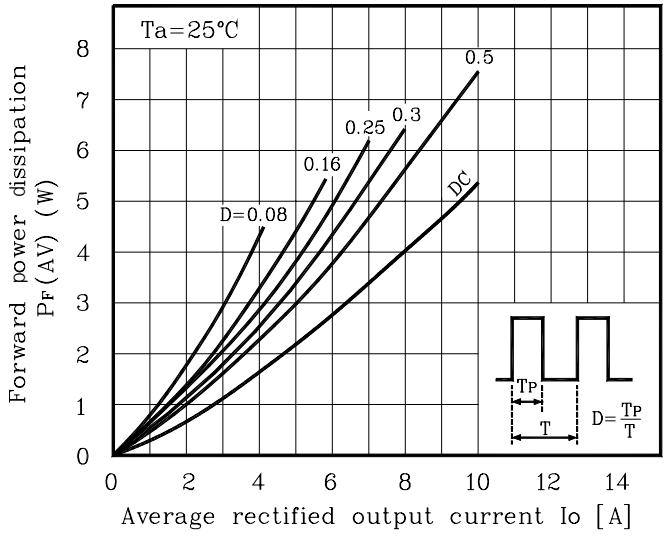


Fig. 4 C_T - V_R

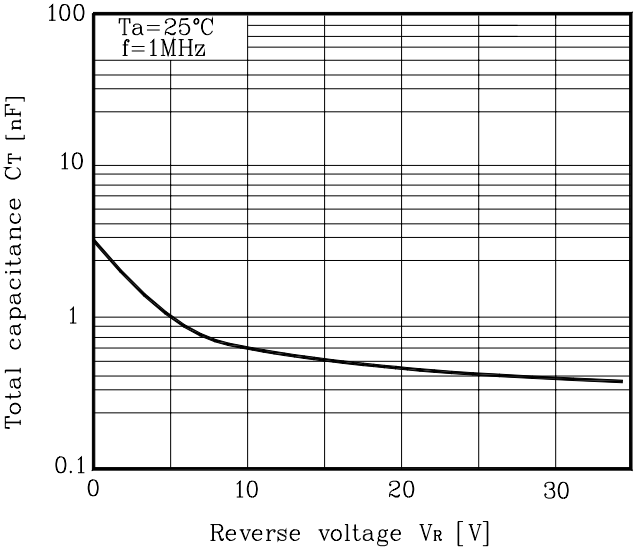


Fig. 5 I_{FSM} – Number of cycle

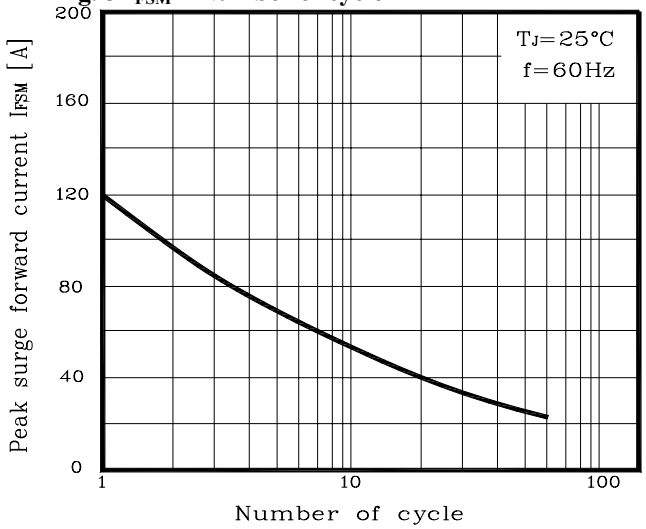
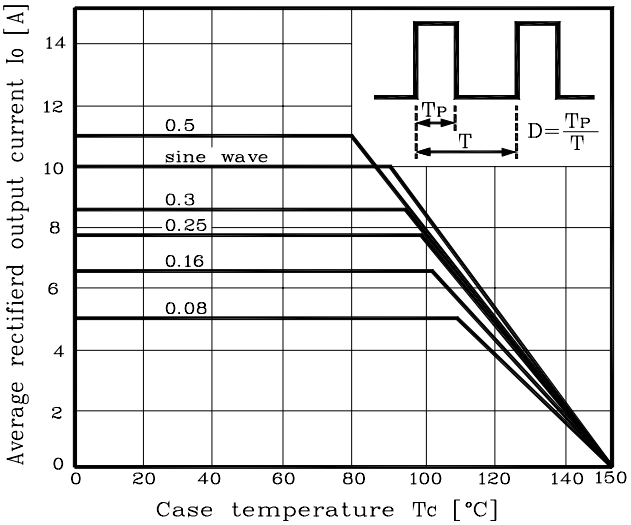


Fig. 6 I_O derating - T_C



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