

Applications

- Switching mode power supply application
- Converter & chopper application

Features

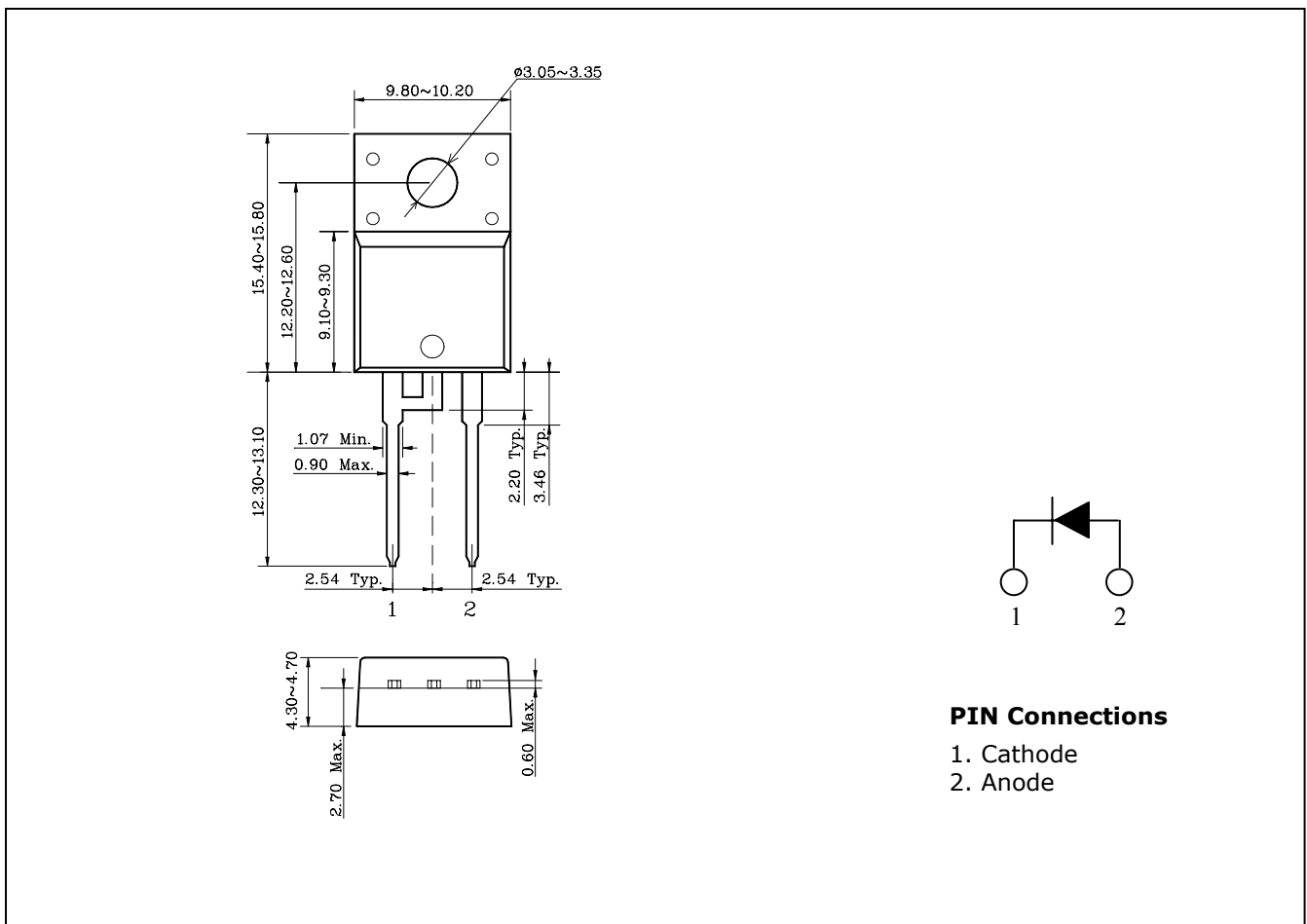
- Low forward voltage: $V_{FM}=0.65V$ Max. @ $I_F=5A$
- Low reverse current: $I_{RRM}=0.5mA$ Max. @ $V_R=60V$
- Low switching loss

Ordering Information

Type No.	Marking	Package Code
SDB560	SDB560	TO-220F-2L

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	5	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	$V_{FM}^{1)}$	$I_F=5A$	-	-	0.65	V
Repetitive peak reverse current	I_{RRM}	$V_R=60V$	-	-	0.5	mA
Total capacitance	C_T	$V_R=10V, f=1.0MHz$	-	160	-	pF
Thermal resistance	R_{th}	Junction to ambient	-	-	62.5	°C/W
		Junction to case	-	-	4	

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

Electrical Characteristic Curves

Fig. 1 $I_O - V_F$

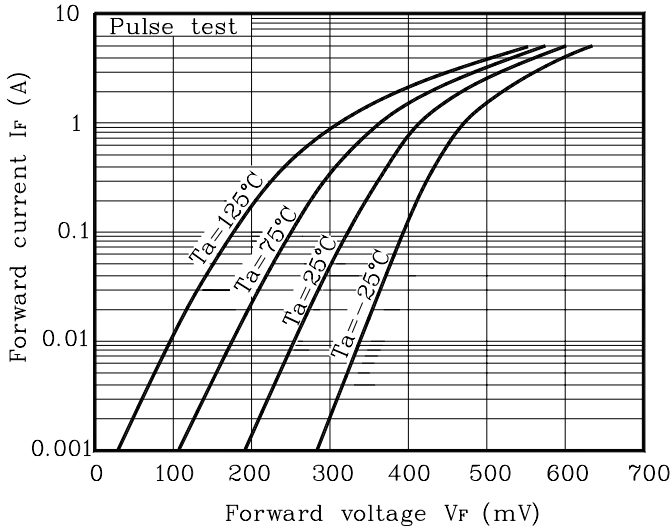


Fig. 2 $I_R - V_R$

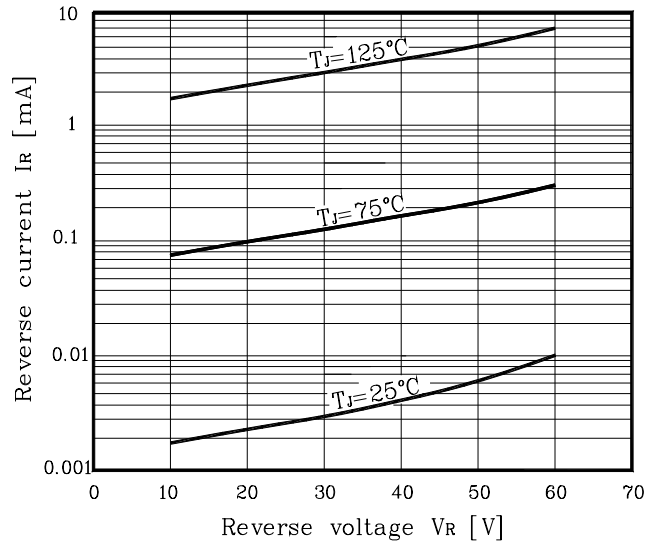


Fig. 3 $P_F - I_O$

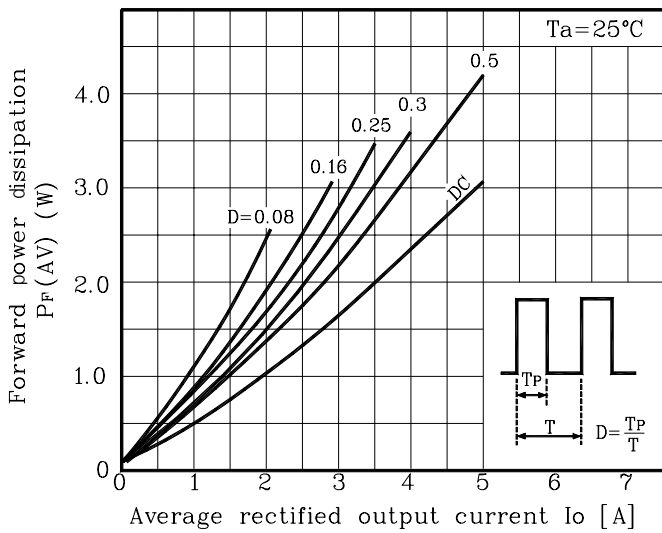


Fig. 4 $C_T - V_R$

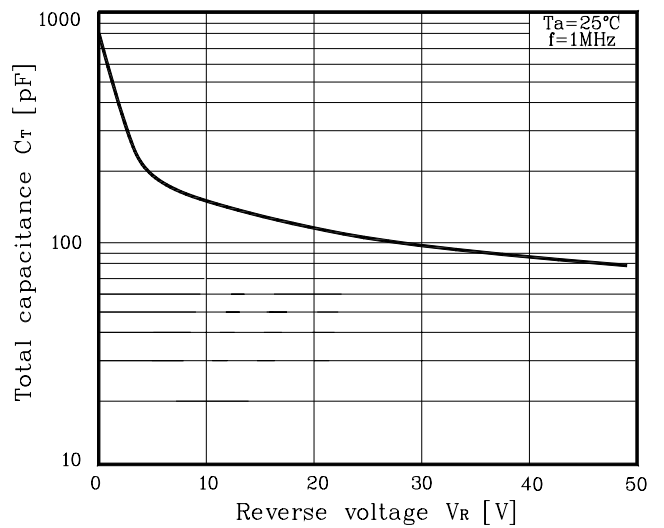


Fig. 5 $I_{FSM} - \text{Number of cycle}$

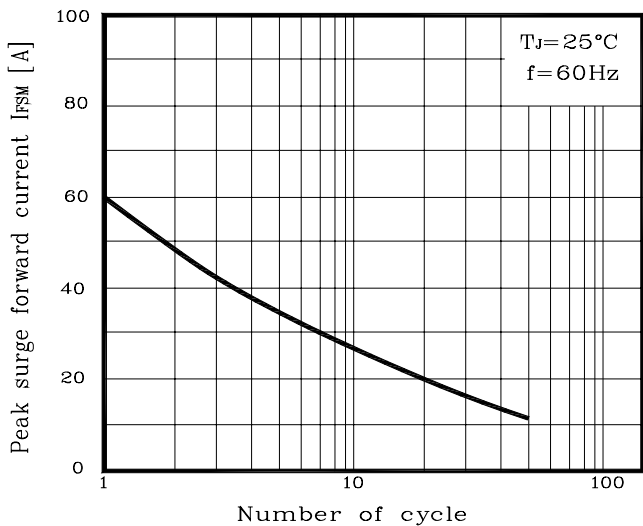
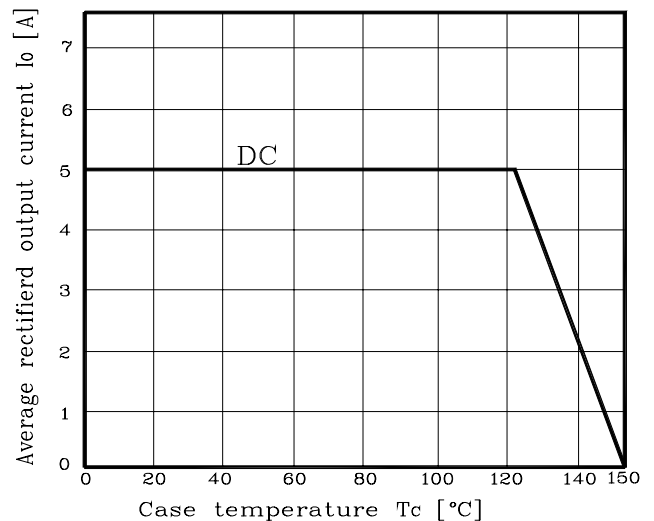


Fig. 6 $I_O \text{ derating} - T_C$



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