

Applications

- High speed switching and rectification
- Switching mode power supply

Features

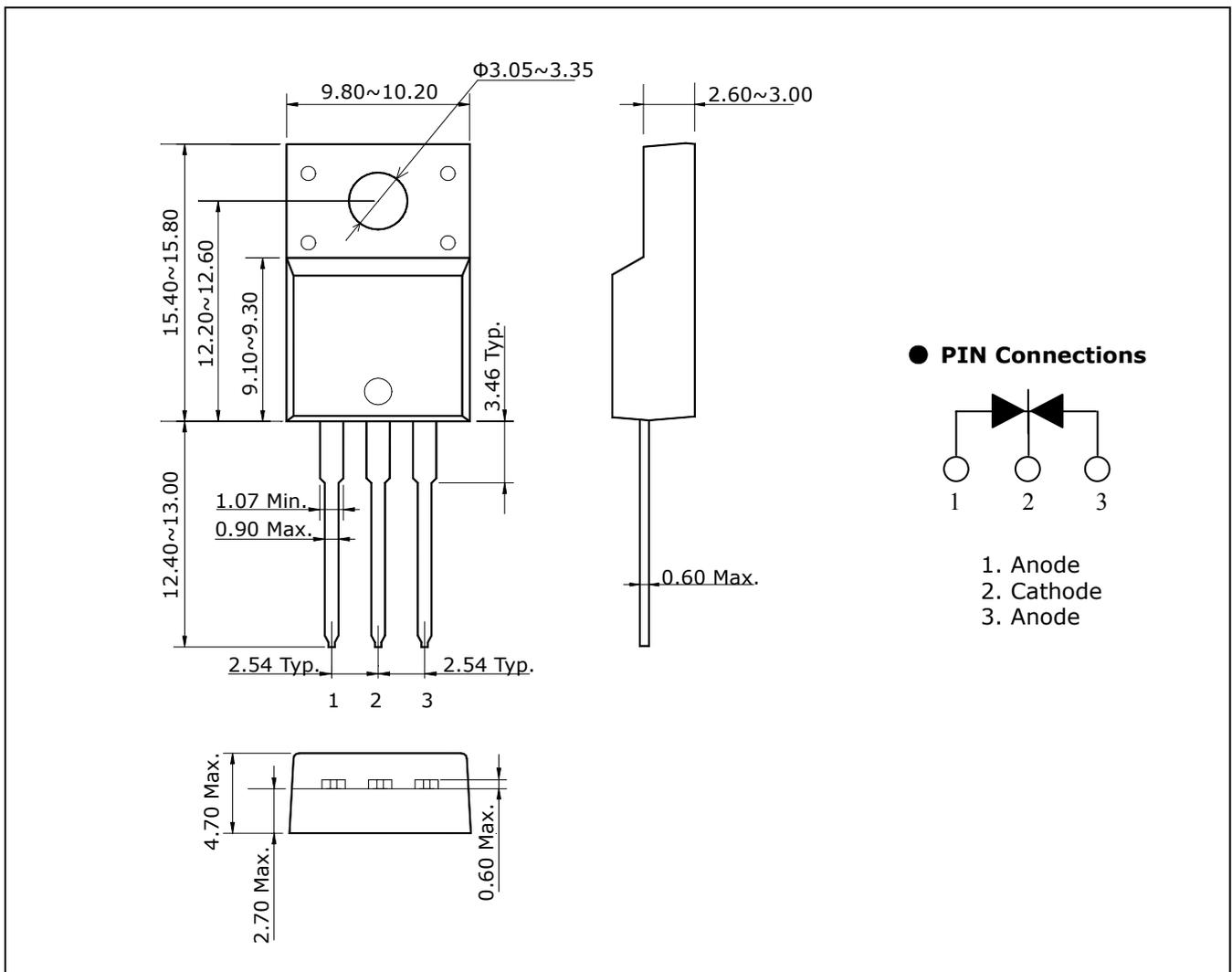
- Dual chip common cathode
- Low forward voltage & low reverse current
- Low switching loss

Ordering Information

Type No.	Marking	Package Code
SDB10150PI	SDB10150PI	TO-220F-3L

Outline Dimensions

unit : mm



Absolute Maximum Ratings $T_C=25^{\circ}\text{C}$

Characteristic	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	150	V
Average rectified output current	I_O	10	A
Peak forward surge 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	$^{\circ}\text{C}$

Electrical Characteristics $T_C=25^{\circ}\text{C}$

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Peak forward voltage	$V_{FM}^{1), 2)}$	$I_F=5\text{A}$	-	-	0.88	V
Repetitive peak reverse current	$I_{RRM}^{1)}$	$V_R=150\text{V}$	-	-	10	μA
Total thermal resistance	R_{th}	Junction to ambient	-	-	62.5	$^{\circ}\text{C}/\text{W}$
		Junction to case	-	-	4.0	

1) per each unit

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

Electrical Characteristic Curves [per each unit]

Fig.1 $I_F - V_F$

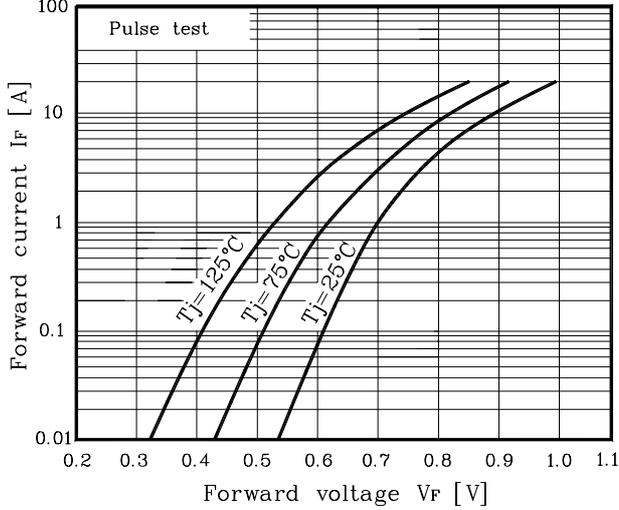


Fig. 2 $I_R - V_R$

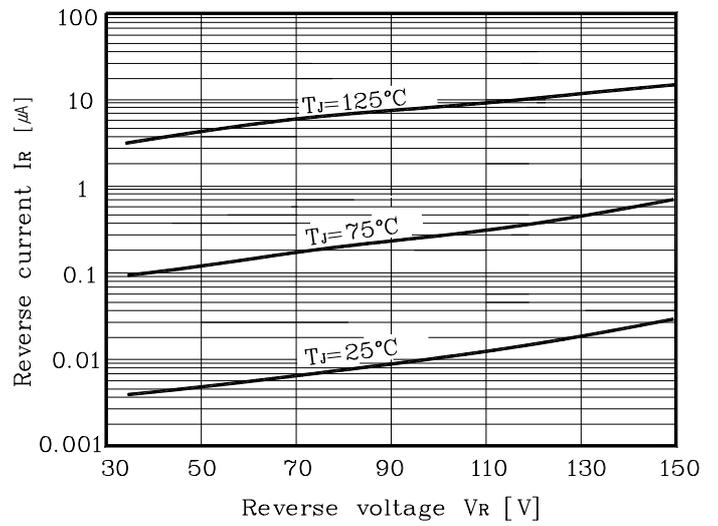


Fig. 3 $P_F - I_O$

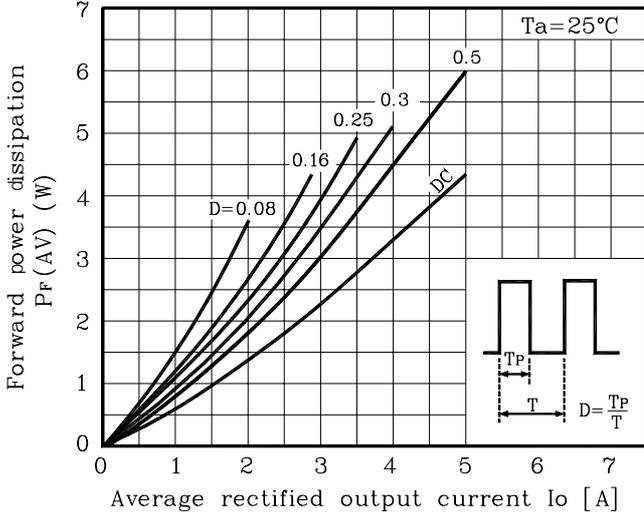


Fig. 4 $C_J - V_R$

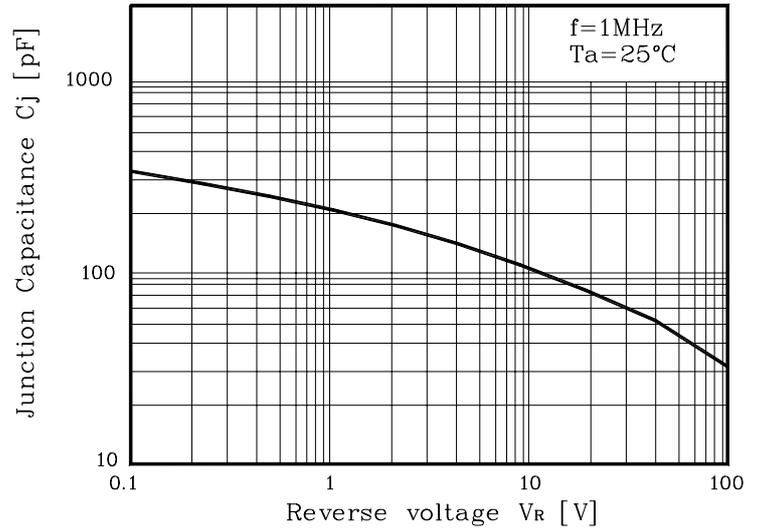


Fig. 5 $I_{FSM} - \text{Number of cycle}$

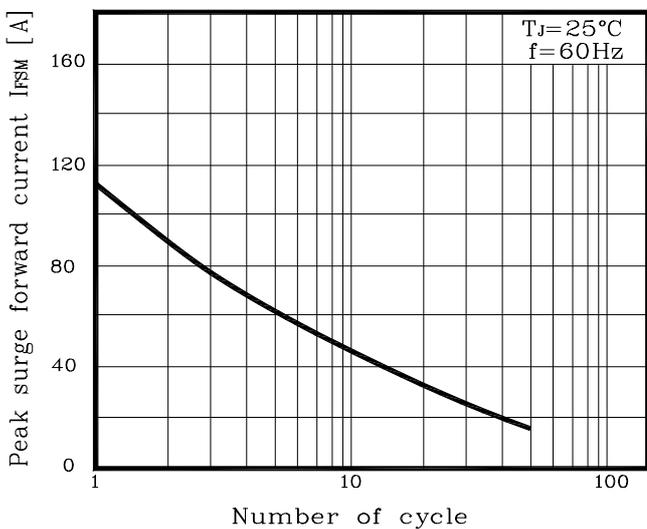
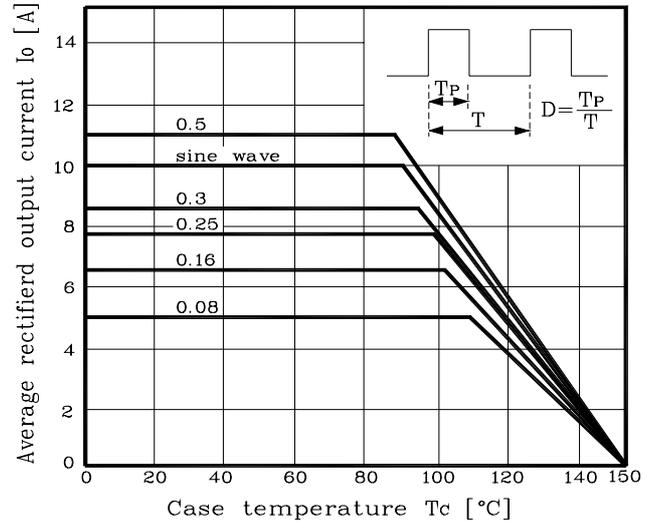


Fig. 6 I_O derating - T_C



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