

## Applications

- High speed switching and rectification
- Switching mode power supply

## Features

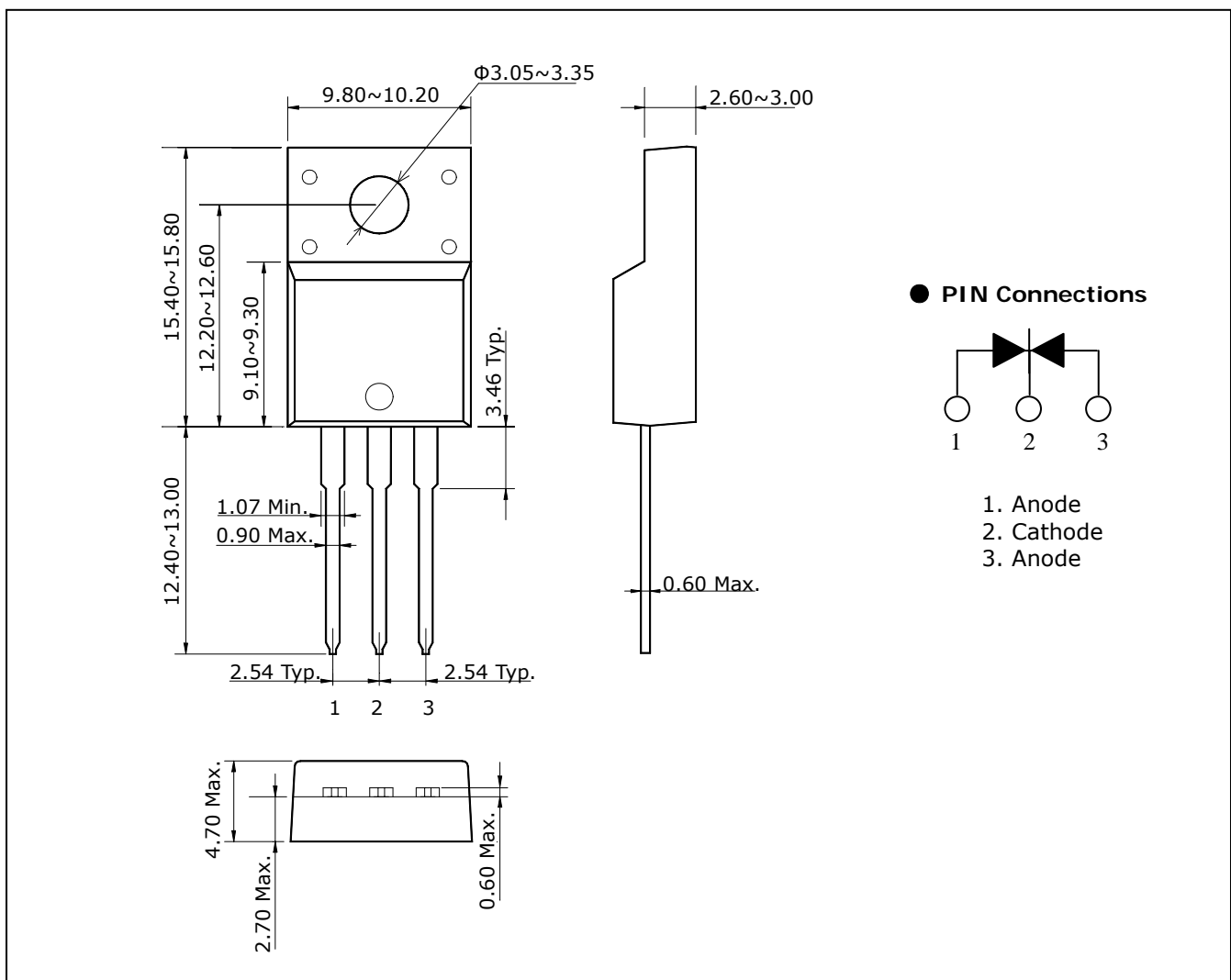
- Dual chip common cathode
- Low forward voltage & low reverse current
- Low switching loss

## Ordering Information

Type No.	Marking	Package Code
SDB10100PI	SDB10100PI	TO-220F-3L

## Outline Dimensions

unit : mm



**Absolute Maximum Ratings**[T<sub>C</sub>=25°C]

Characteristic	Symbol	Rating	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
Average rectified output current	I <sub>O</sub>	10	A
Peak forward surge current (Non-repetitive 60Hz sine wave)	I <sub>FSM</sub>	120	A
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-45 ~ 150	°C

**Electrical Characteristics**[T<sub>C</sub>=25°C]

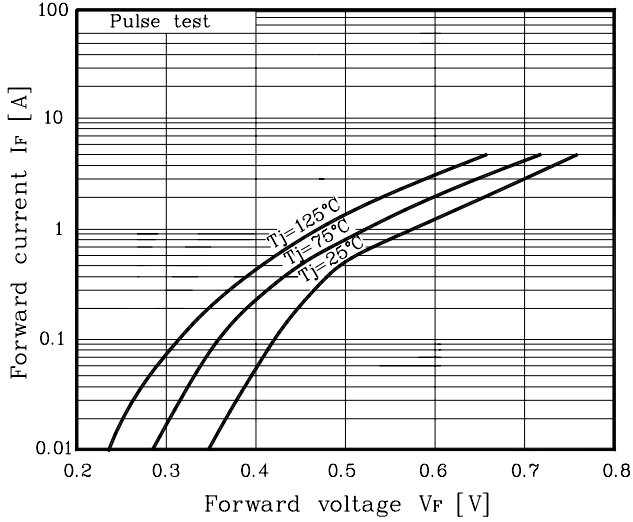
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Peak forward voltage	V <sub>FM</sub> <sup>1), 2)</sup>	I <sub>F</sub> =5A	-	-	0.85	V
Repetitive peak reverse current	I <sub>RRM</sub> <sup>1), 2)</sup>	V <sub>R</sub> =100V	-	-	10	μA
Thermal resistance	R <sub>th</sub>	Junction to ambient	-	-	62.5	°C/W
		Junction to case	-	-	4.0	

1) per each unit

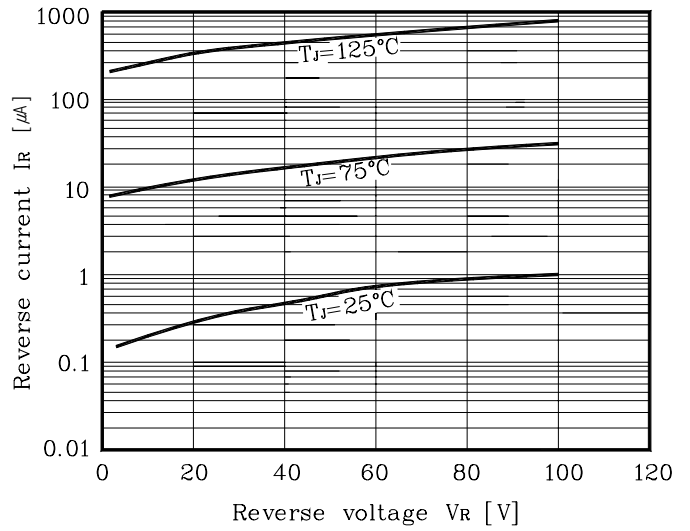
2) Pulse test : t<sub>p</sub> ≤ 380 μs, Duty cycle ≤ 2%

## Electrical Characteristic Curves [per each unit]

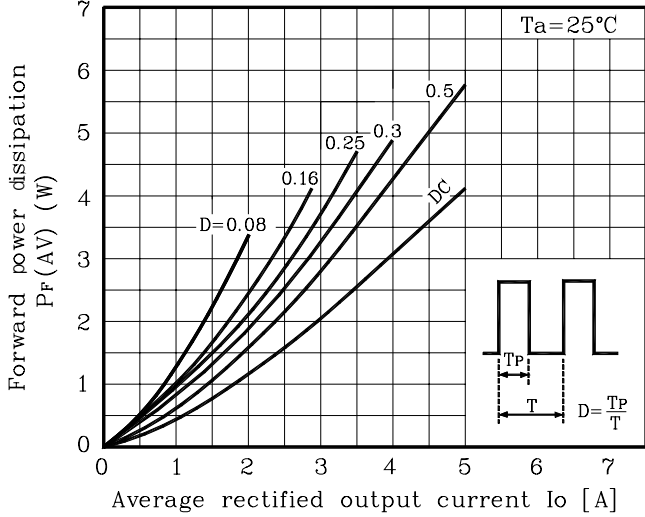
**Fig. 1  $V_F - I_F$**



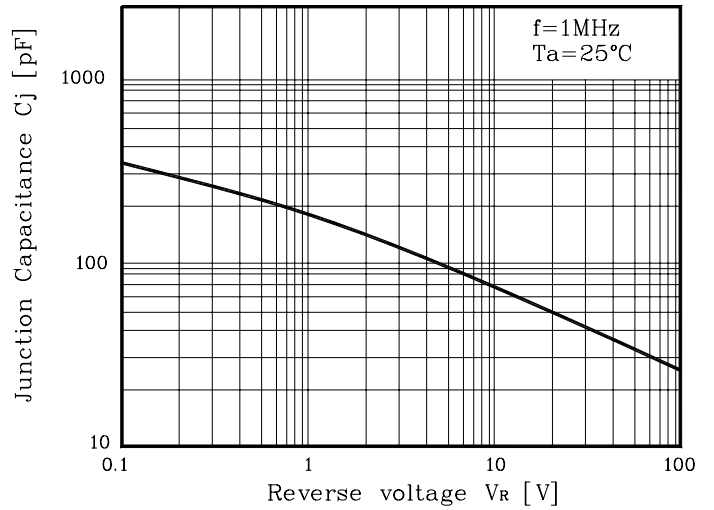
**Fig. 2  $I_R - V_R$**



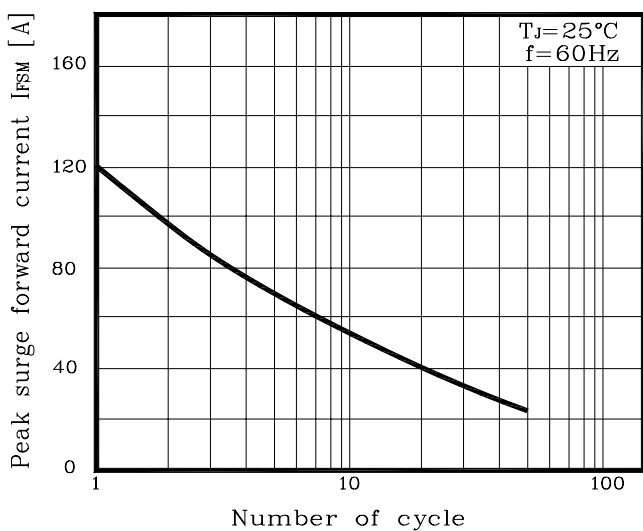
**Fig. 3  $I_O - P_F$**



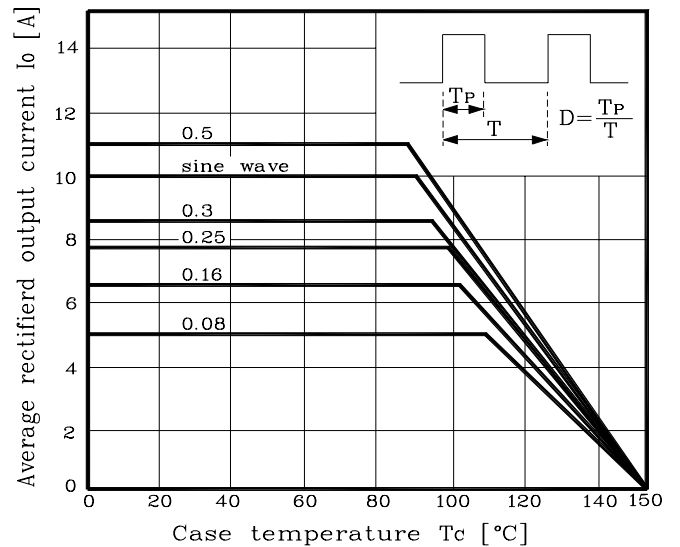
**Fig. 4  $C_T - V_R$**



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



**Fig. 6  $I_O$  derating -  $T_C$**



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