

Applications

- High speed switching and rectification
- Switching mode power supply

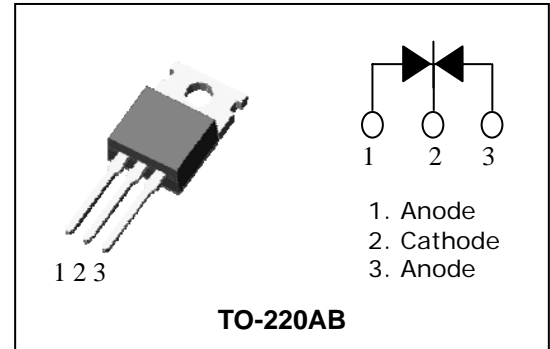
Features

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

Ordering Information

Type No.	Marking	Package Code
SDB20100P	SDB20100P	TO-220AB

PIN Connection



Absolute Maximum Ratings

[T_C=25°C]

Characteristic	Symbol	Rating	Unit
Repetitive peak reverse voltage	V _{RRM}	100	V
Average rectified output current	I _O	20	A
Peak forward surge current (Non-repetitive 60Hz sine wave)	I _{FSM}	120	A
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-45 ~ 150	°C

Electrical Characteristics

[T_C=25°C]

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Peak forward voltage	V _{FM} ^{1), 2)}	I _F =10A	-	-	0.85	V
Repetitive peak reverse current	I _{RRM} ^{1), 2)}	V _R =100V	-	-	20	μA
Thermal resistance	R _{th}	Junction to case	-	-	3.0	°C/W

1) Per Diode

2) Pulse test : t_p ≤ 380 μs, Duty cycle ≤ 2%

Electrical Characteristic Curves

Fig. 1 $I_F - V_F$ (Per Diode)

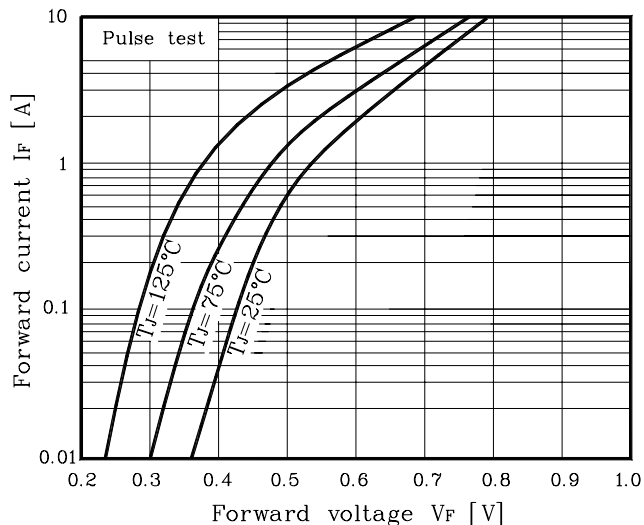


Fig. 2 $I_R - V_R$ (Per Diode)

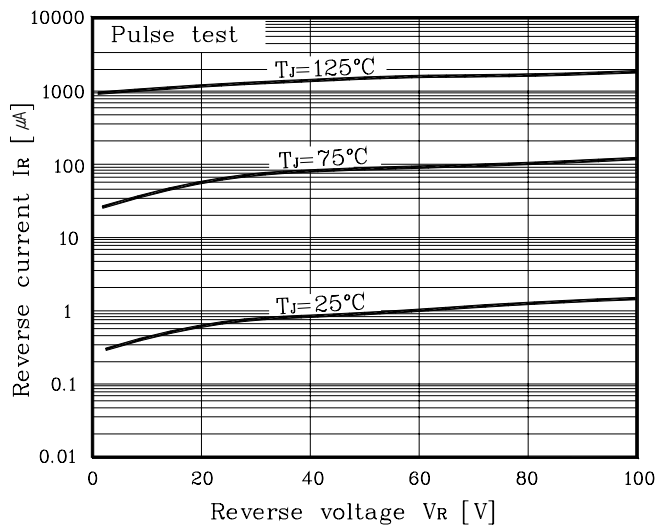


Fig. 3 $I_O - P_F$ (Per Diode)

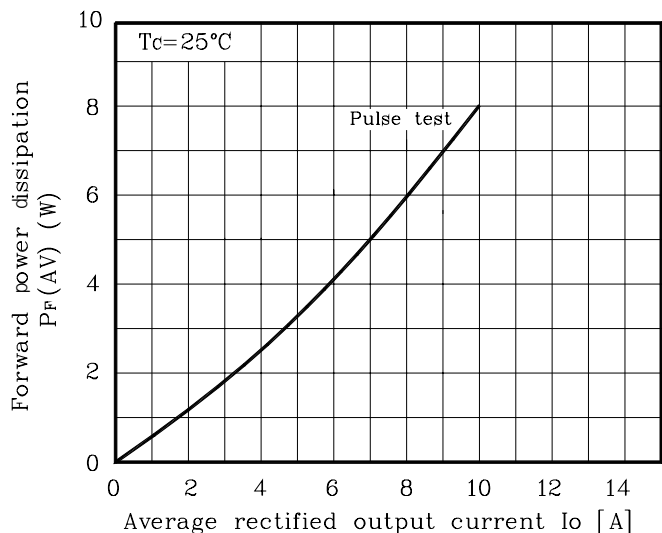


Fig. 4 $C_T - V_R$ (Per Diode)

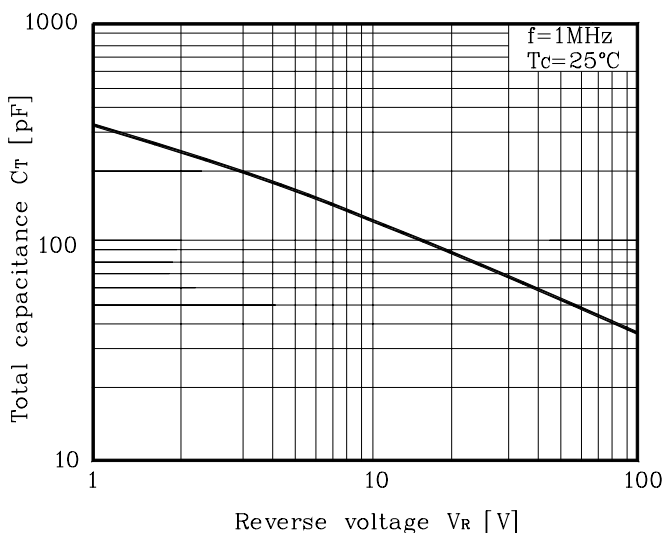


Fig. 5 $I_{FSM} - \text{Number of cycle}$ (Per Diode)

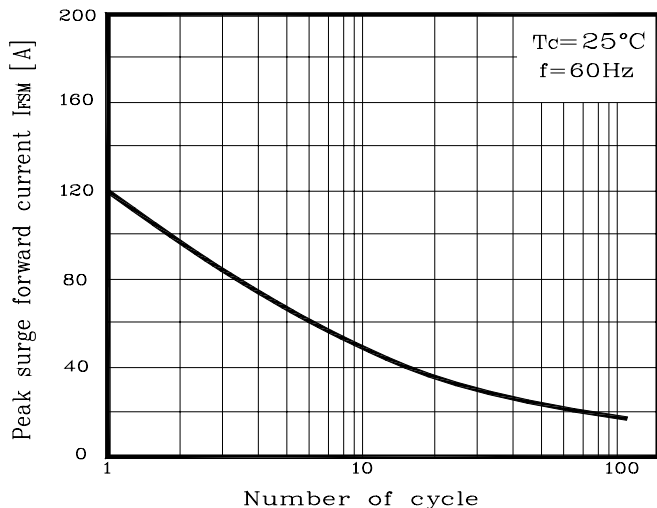
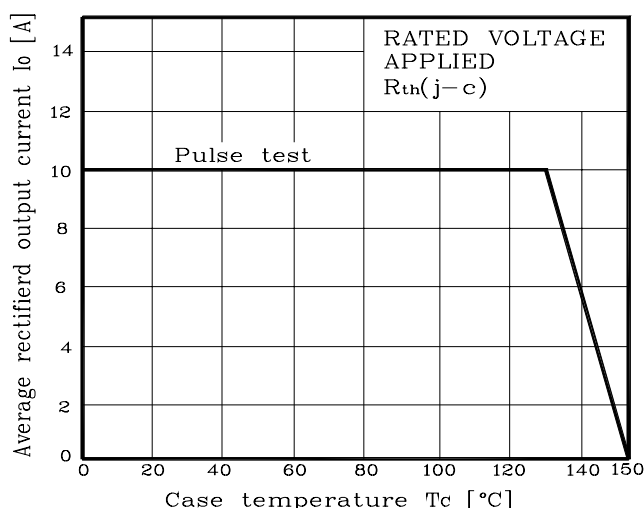
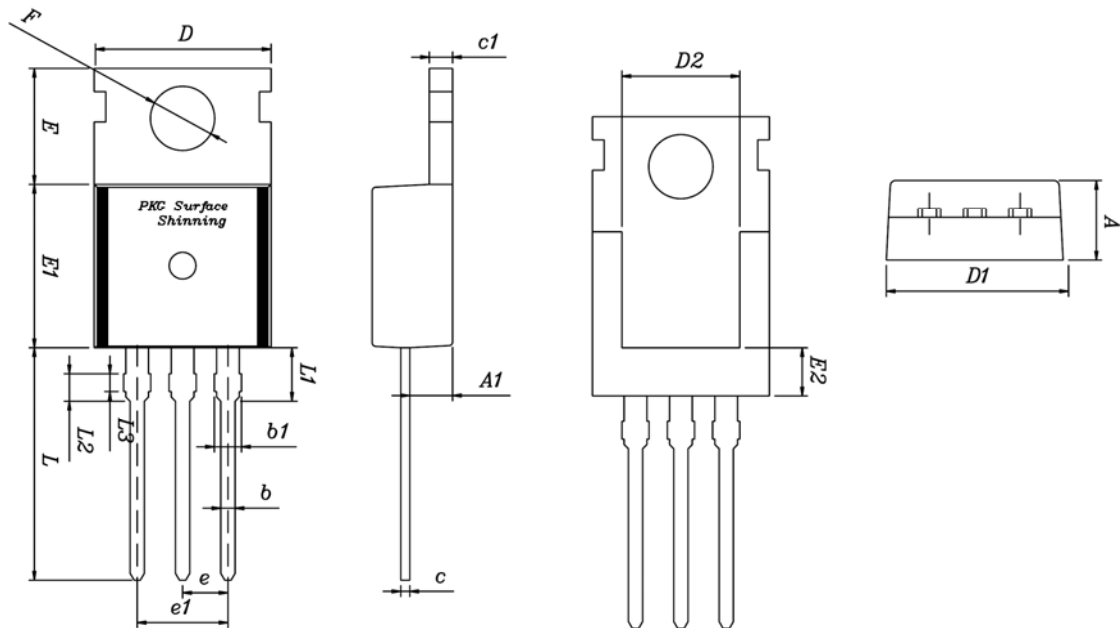


Fig. 6 I_O derating - T_C (Per Diode)



Outline Dimension



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	4.35	4.50	4.65	
A1	2.20	2.40	2.60	
b	0.65	0.80	0.95	
b1	1.42	1.52	1.62	
C	0.40	0.50	0.60	
C1	1.20	1.30	1.40	
D	9.80	10.00	10.20	
D1	9.85	10.00	10.15	
D2	6.40	6.60	6.80	
E	6.30	6.50	6.70	
E1	9.05	9.20	9.35	
E2	2.50	2.70	2.90	
F	3.50	3.60	3.70	
e	2.34	2.54	2.64	
e1	4.88	5.08	5.28	
L	12.68	13.08	13.48	
L1	2.80	3.00	3.20	
L2	1.49	1.54	1.59	
L3	0.95	1.00	1.05	

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.