FEATURES

- Trench Schottky technology
- Lower forward voltage
- Lower power loss,high efficiency
- Softest, fast switching capability
- High surge capability
- Lead Free Finish,ROHS Compliant

TYPICAL APPLICATIONS

For use in high frequency rectifier of switching mode power supplies, freewheeling diodes, DC/DC converters or polarity protection application

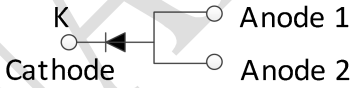
PRIMIARY CHARACTERISTICS	
$IF_{(AV)}$	5A
V_{RRM}	100V
I_{FSM}	120A
VF	0.58V
$T_{J\,max.}$	150℃

DO-201AD

TBR5100SD

TO-277B

TBR5100SP



Maximum ratings and electrical characteristics

(T_A = 25 °C unless otherwise noted)

Parameter	Description	Test Condition		Min.	Typ.	Max.	Unit
V_{RRM}	Maximum repetitive peak reverse voltage	I_R =500μA		105	117	—	V
$IF_{(AV)}$	Maximum average forward rectified current			—	—	5	A
I_{FSM}	Maximum Peak forward surge current	1/2 60hz		—	—	120	A
V_F	Static Forward Voltage	I_F = 1A	T_A=25℃	—	0.41	0.45	V
		I_F = 5A		—	0.58	0.64	V
		I_F = 1A	T_A=125℃	—	0.31	0.41	V
		I_F = 5A		—	0.54	0.64	V
I_R	Maximum reverse current per diode at working peak reverse voltage	V_R =100V	T_A=25℃	—	10	30	μA
			T_A=125℃	—	5	30	mA
$R_{\theta JL}$	Typical Thermal Resistance	DO-201AD		10			℃/W
		TO-277B		3			
T_J, T_{STG}	Operating and Storage Temperature Range	-55℃ to 150℃ Max					

PRELIMINARY

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

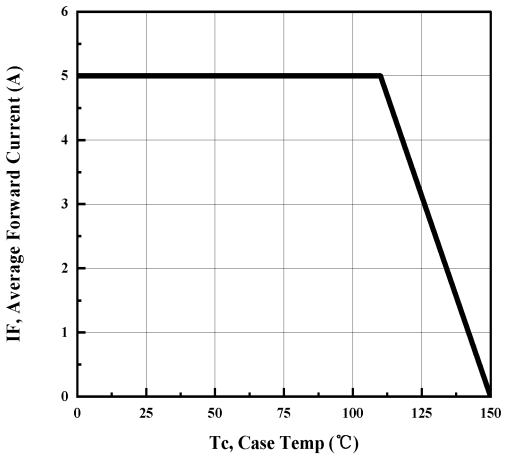


Fig. 1: Forward Current Derating Curve

Fig. 2: Maximum Repetitive Surge Current

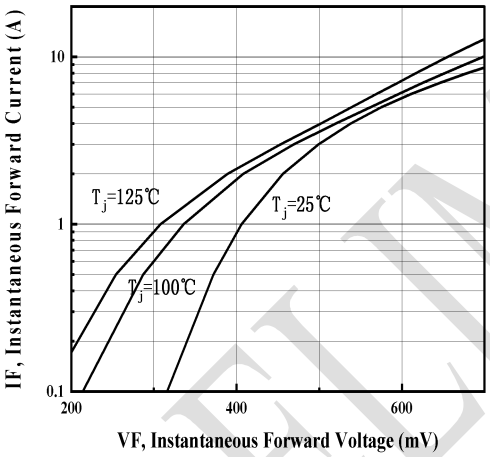


Fig. 3: Typical Forward Voltage

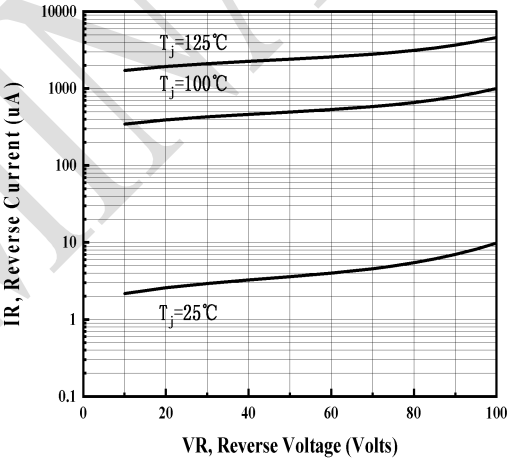


Fig. 4: Typical Reverse Current

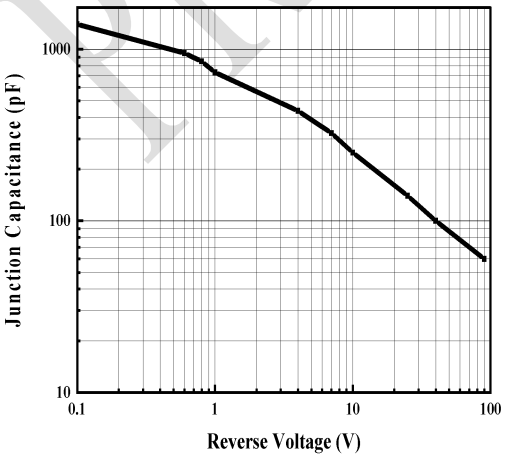
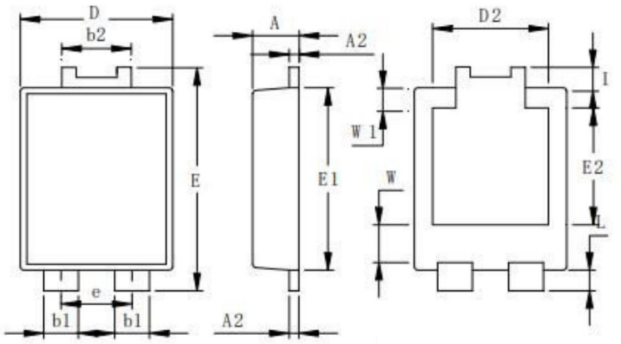


Fig. 5: Typical Junction Capacitance

PRELIMINARY

PACKAGE OUTLINE DIMENSIONS in millimeters



TO-277B(TBR5100SP)

NO	Min	Max	NO	Min	Max
A	0.95	1.25	e	1.78	1.98
A2	0.25	0.35	E1	5.28	5.48
b1	0.85	0.95	E2	3.39	3.69
b2	1.75	1.85	L	0.41	0.71
D	3.93	4.13	L1	0.41	0.71
D2	2.85	3.15	W	1.44	1.74
E	6.30	6.70	W1	0.05	0.45
All Dimensions in mm					

PRELIMINARY

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