

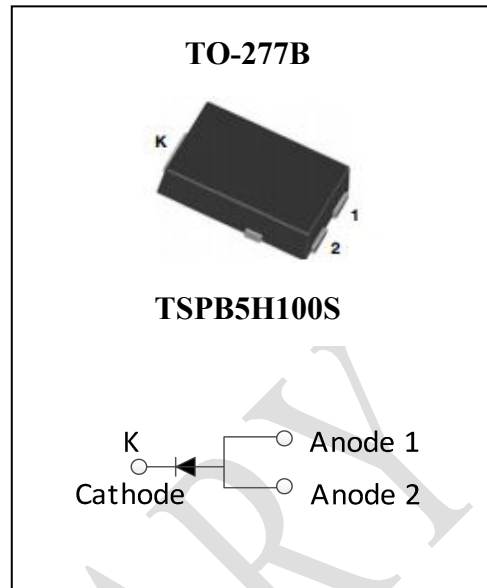


FEATURES

- 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



PRIMARY CHARACTERISTICS	
IF (AV)	5A
VRRM	100V
IFSM	150A
VF	0.55V
TJ max.	150°C

Maximum ratings and electrical characteristics (TA = 25 °C unless otherwise noted)

Parameter	Description	Test Condition	Min.	Typ.	Max.	Unit	
VRRM	Maximum repetitive peak reverse voltage	IR=500μA	108	117	—	V	
IF (AV)	Maximum average forward rectified current		—	—	5	A	
IFSM	Maximum Peak forward surge current	1/2 60hz	—	—	150	A	
VF	Static Forward Voltage	IF = 1A	TA=25°C	—	0.40	0.49	V
		IF =5A		—	0.55	0.58	V
		IF = 1A	TA=125°C	—	0.31	0.41	V
		IF =5A		—	0.50	0.60	V
IR	Maximum reverse current per diode at working peak reverse voltage	VR =100V	TA=25°C	—	9	30	μA
			TA=125°C	—	5	30	mA
ROJL	Typical Thermal Resistance	TO-277B	3			°C/W	
TJ, TSTG	Operating and Storage Temperature Range	-55°C to 150°C Max					



RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

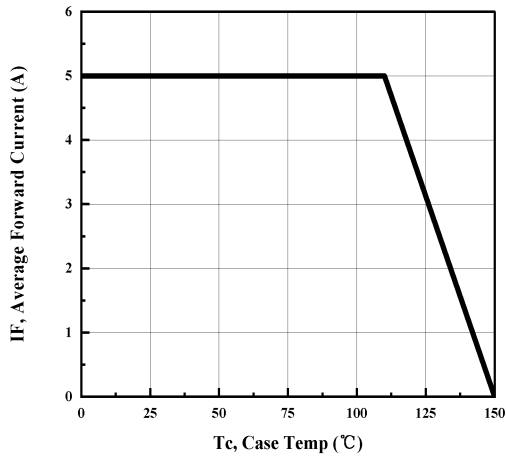


Fig. 1: Forward Current Derating Curve

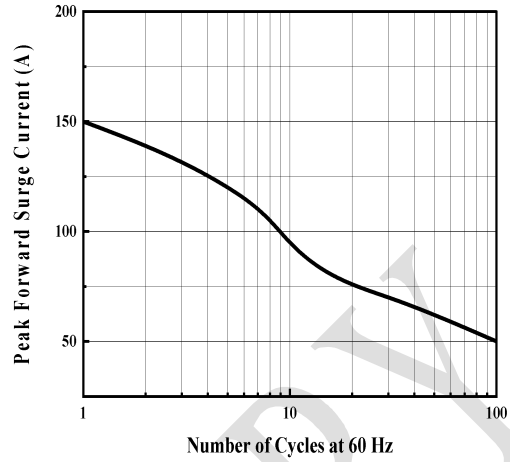


Fig. 2: Maximum Repetitive Surge Current

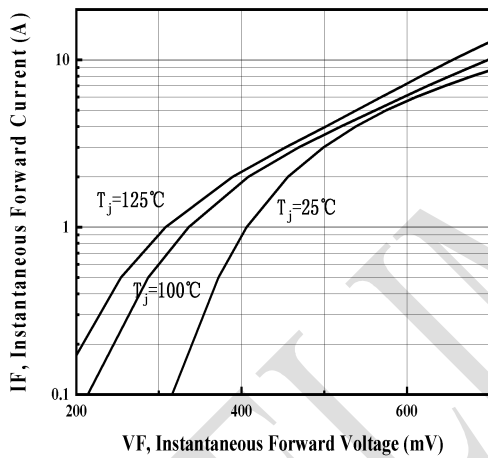


Fig. 3: Typical Forward Voltage

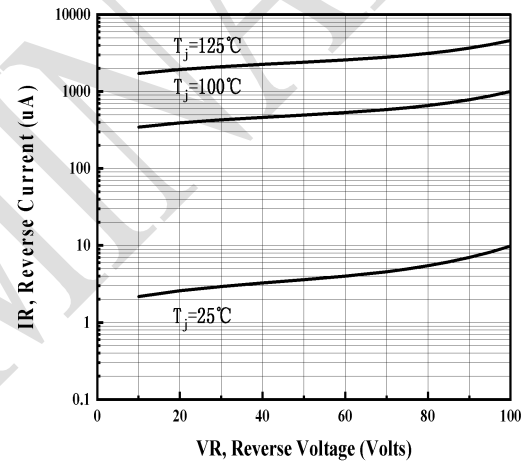


Fig. 4: Typical Reverse Current

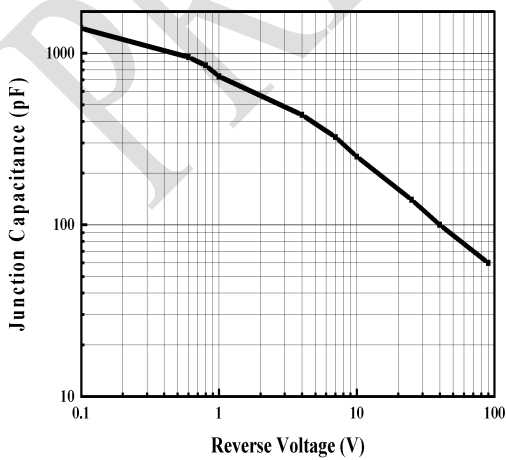
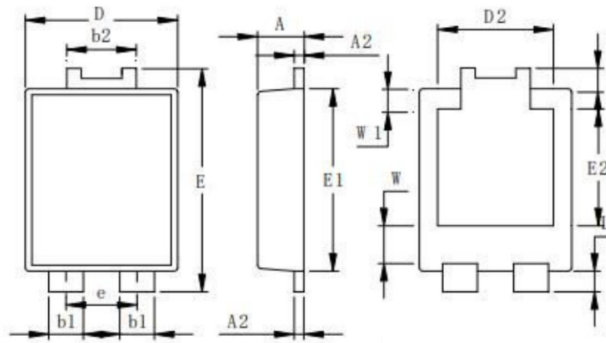


Fig. 5: Typical Junction Capacitance



PACKAGE OUTLINE DIMENSIONS in millimeters



TO-277B(TBR5H100S)

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					

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