Description

Diode include a high−efficiency, low power loss, general−propose Schottky rectifiers. The clipbonded leg structure provides high thermal performance and low electrical resistance.

Applications

- For use in low voltage high frequency invertersHigh-Frequency Inverters
- Freewheeling, DC/DC converters
- Polarity Protection

Features

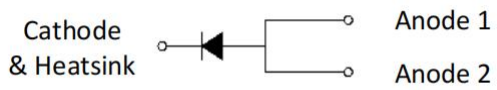
- Low profile package
- V_{RRM} 100v $IF_{(AV)}$ 10A
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High forwar surge current capability
- High temperature soldering： 260℃/10 seconds at terminals

Mechanical Characteristics

- Package: TO277B
- Case Material:Molded Plastic. UL Flammability Classification Rating 94V-0 .RoHS compliant
- Moisture Sensitivity: Meet MSL 1
- Terminal： Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode except bi-directional models

Dimension & Symbol (Unit: mm Max)

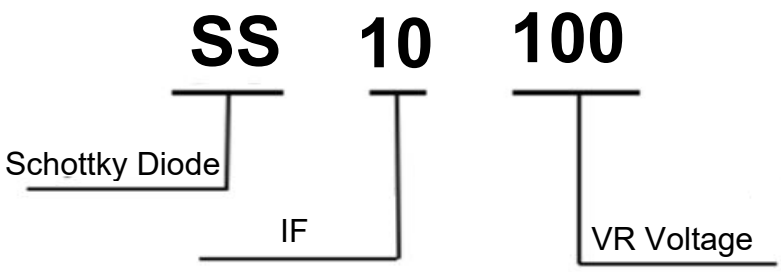
TO-277B



Electrical Characteristics (T=25℃)

Parameters		Symbol	SS10100	Unit
Maximum repetitive peak reverse voltage		VRRM	100	V
Maximum average forward rectified current		IF(AV)	10	A
Non-repetitive Peak forward surge current 8.3 ms single half sine-wave		IFSM	220	A
Max. forward voltage @IF=10A		VF	0.67	V
@VDC Max.reverse current	TA=25℃	IR	100	uA
	TA=125℃		3	mA
Operation junction		Tj	-55±150	℃
Storage temperature range		TSTG	-55±150	℃

Part number code



Typical Characteristics

FIG1：Io-TL Curve

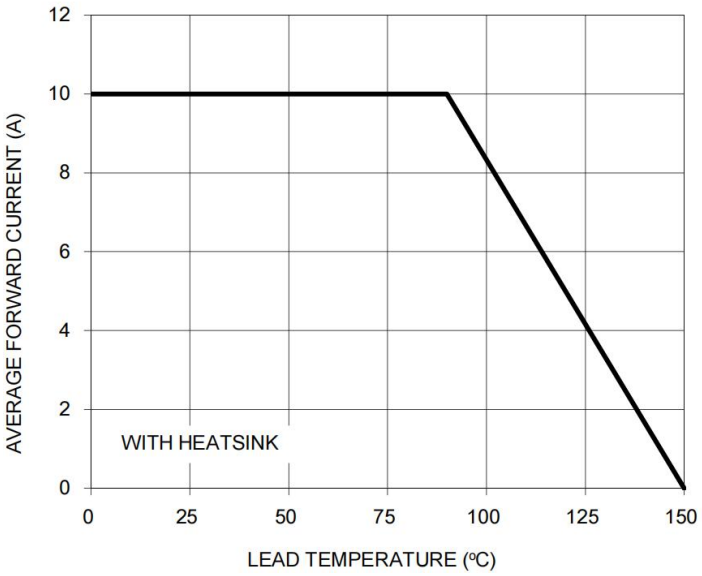


FIG2：Surge Forward Current Capability

FIG3：Typcal Recerse Characteristics

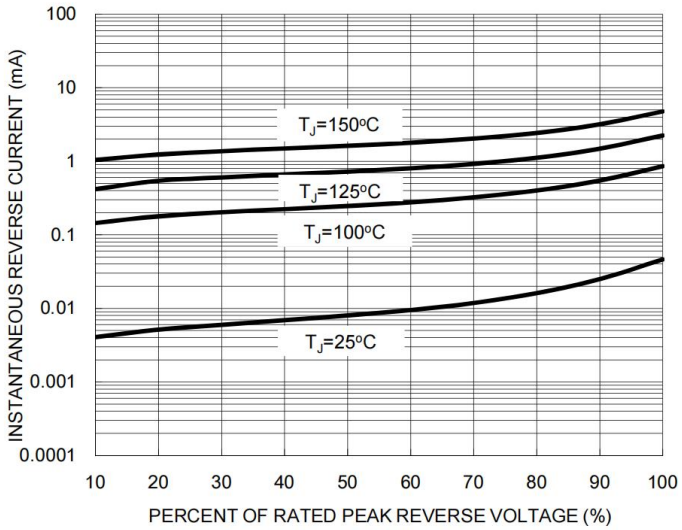
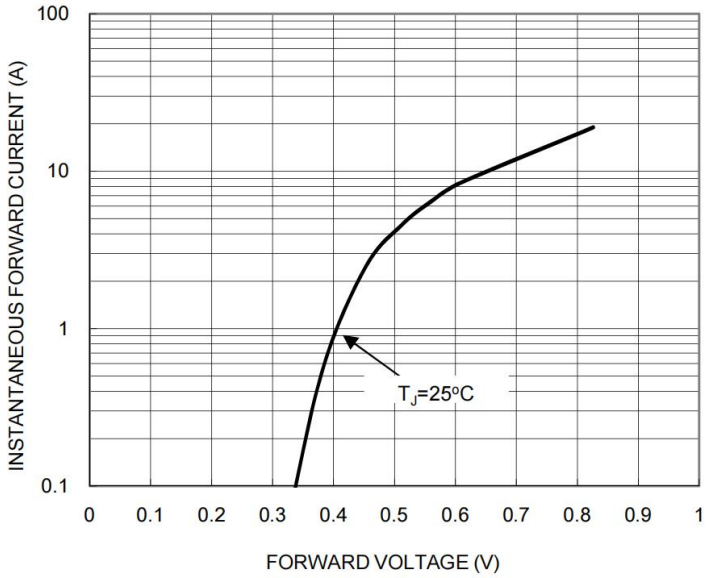


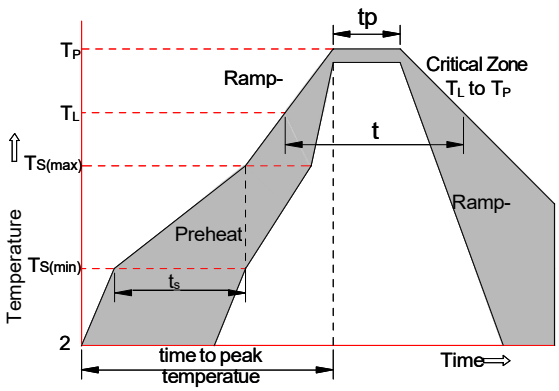
FIG4: Typcal Forward Characteristics



Soldering parameters

Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217℃
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)℃
Time within 5℃ of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6℃/sec. Max
Time 25℃ to Peak Temp (T_P)		8 min. Max
Do not exceed		+260℃

FIG5: Reflow condition



Package mechanical data & Suggested Land Pattern