

VOLTAGE RANGE: 45V
CURRENT: 10 A

Features

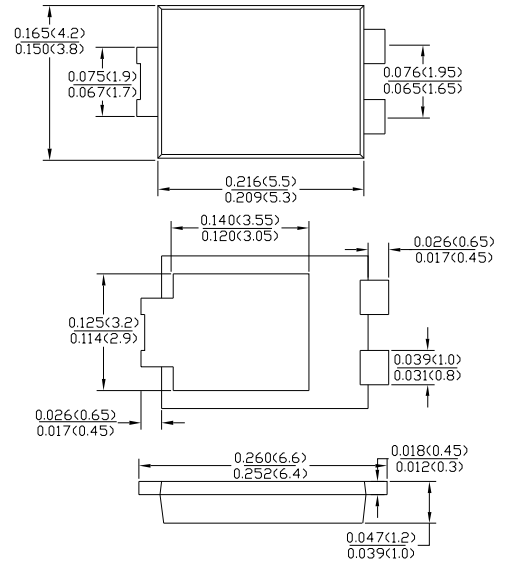
- Bypass Diodes for Solar Panels
- Maximum Junction Temperature 200°C
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss, High Efficiency
- Excellent High Temperature Stability

Mechanical Data

- Case: TO-277 Molded Plastic "Green" Molding Compound
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.093 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



T0-277



Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

Characteristic	Symbol	SR1045L	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	45	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	32	V
Average Rectified Output Current (Note 1)	I _o	10.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150	A
Forward Voltage Drop @I _F = 10A, T _j = 25°C	V _{FM}	0.53	V
Peak Reverse Current At Rated DC Blocking Voltage @V _F = 45V, T _j = 25°C @V _F = 45V, T _j = 100°C	I _{RM}	0.3 15	mA
Typical Thermal Resistance Junction to Ambient (Note 2) (Note 3)	R _{θJA}	73 31	°C/W
Operating Temperature Range @V _R ≤ 80% V _{RRM} DC Forward Mode	T _j	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +15	°C

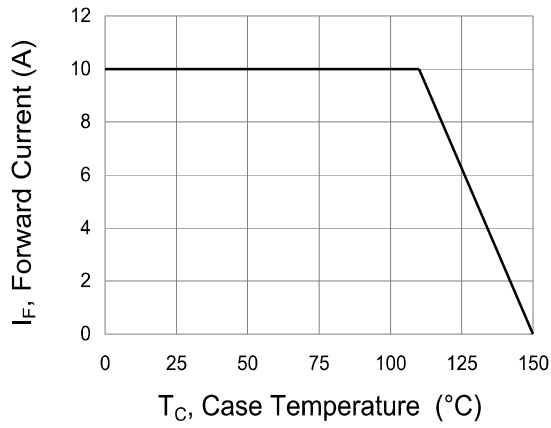


Fig. 1 Forward Power Dissipation

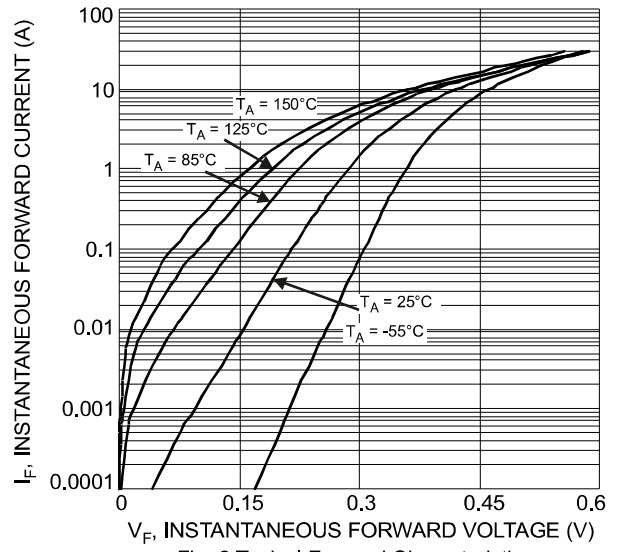


Fig. 2 Typical Forward Characteristics

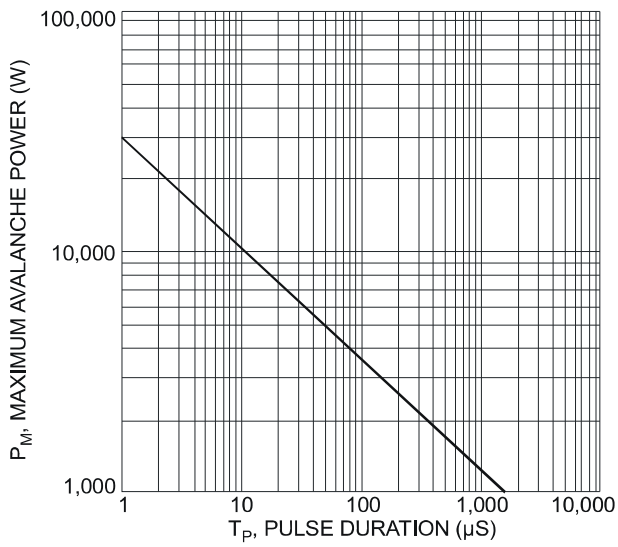


Fig. 3 Maximum Avalanche Power