

TECHNICAL DATA
DATA SHEET 4782, REV. C**SILICON SCHOTTKY RECTIFIER**
Low Reverse Leakage
175°C Operating Temperature**Applications:**

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

Features:

- Low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics

Maximum Ratings:

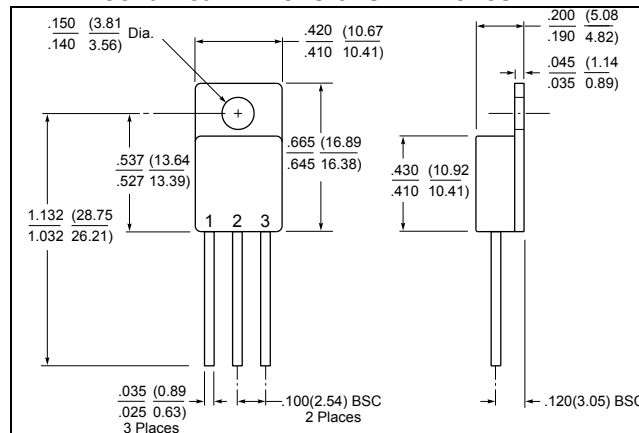
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	200	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Single/Doubler)	15	A
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Common Cathode/Common Anode)	15	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine wave	75	A
Max. Junction Temperature	T_J	-	-65 to +175	°C
Max. Storage Temperature	T_{stg}	-	-65 to +175	°C
Thermal Resistance(per leg)	$R_{\theta JC}$	-	2.82	°C/W

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 15A, Pulse, $T_J = 25^\circ\text{C}$	1.01	V
	V_{F2}	@ 15A, Pulse, $T_J = 125^\circ\text{C}$	0.9	V
Max. Reverse Current	I_{R1}	@ $V_R = 200\text{V}$, Pulse, $T_J = 25^\circ\text{C}$	0.35	mA
	I_{R2}	@ $V_R = 200\text{V}$, Pulse, $T_J = 125^\circ\text{C}$	8.0	mA
Max. Junction Capacitance	C_T	@ $V_R = 5\text{V}$, $T_C = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$, $V_{SIG} = 50\text{mV (p-p)}$	300	pF

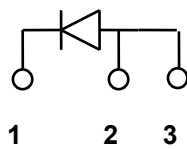
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DATA SHEET 4782, REV. C

Mechanical Dimensions: In Inches / mm

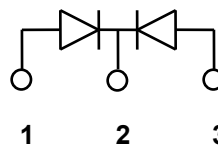


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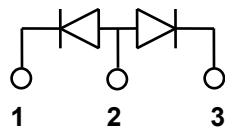
SINGLE



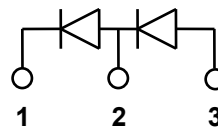
COMMON CATHODE



COMMON ANODE



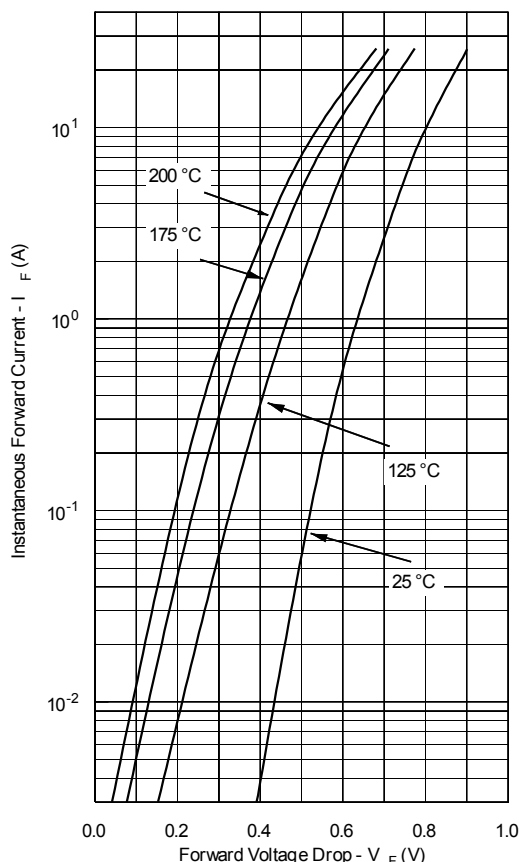
DOUBLER



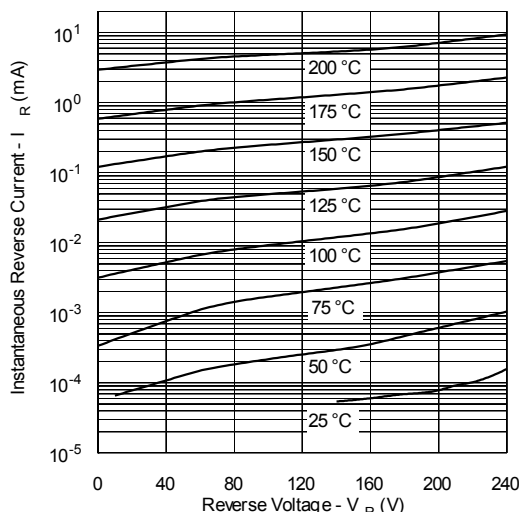
DEVICE TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DOUBLER (D)	ANODE	CATHODE / ANODE	CATHODE

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DATA SHEET 4782, REV. C

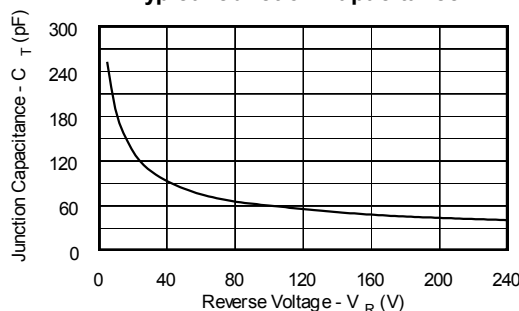
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



Note: The V_F curves shown are for the SD125SC200 unpackaged die only.

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