TECHNICAL DATA DATA SHEET 4777, REV. -

# HERMETIC POWER SCHOTTKY RECTIFIER Very Low Forward Voltage

# **Applications:**

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

## Features:

- Soft Reverse Recovery at Low and High Temperature
- Very 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

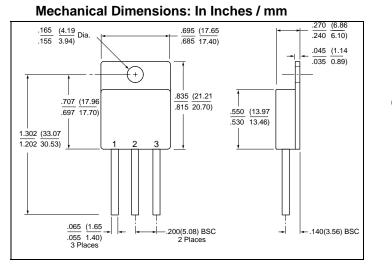
## **Maximum Ratings:**

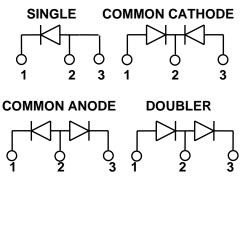
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V <sub>RWM</sub>	-	60	V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form (Single/Doubler)	45	A
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form (Common Cathode/Common Anode)	45	A
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine wave (per leg)	1650	A
Max. Thermal Resistance	R <sub>0JC</sub>	Per package	0.33	°C/W
Max. Junction Temperature	TJ	-	-65 to +175	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +175	°C

# **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V <sub>F1</sub>	@ 45A, Pulse, T <sub>J</sub> = 25 °C	0.79	V
		(per leg)		
	V <sub>F2</sub>	@ 45A, Pulse, T <sub>J</sub> = 125 °C	0.69	V
		(per leg)		
Max. Reverse Current	I <sub>R1</sub>	$@V_{R} = 60V, Pulse,$	3	mA
		$T_J = 25 \ ^{\circ}C \ (per leg)$		
	I <sub>R2</sub>	$@V_R = 60V$ , Pulse,	180	mA
		$T_J = 125 \ ^{\circ}C \ (per leg)$		
Max. Junction Capacitance	CT	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	5000	pF
		f <sub>SIG</sub> = 1MHz,		
		$V_{SIG} = 50 \text{mV} \text{ (p-p)} \text{ (per leg)}$		

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#### PINOUT TABLE

ТҮРЕ	PIN 1	PIN 2	PIN 3			
SINGLE RECTIFIER	CATHODE	ANODE	ANODE			
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2			
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2			
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ANODE	CATHODE			
Note: The V/ survey shows and far the CDOZEODCO we reach and die arth						

**Note:** The V<sub>f</sub> curves shown are for the SD275SB60 un-packaged die only.



#### **TECHNICAL DATA**

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