

TECHNICAL DATA DATA SHEET 4678, 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:

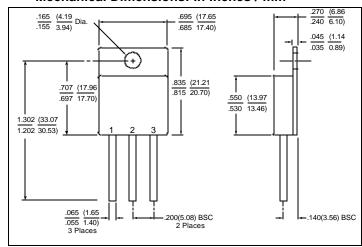
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	15	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Single/Doubler)	7.5	Α
Max. Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form (Common Cathode/Common Anode)	15	А
Max. Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine wave (per leg)	140	A
Max. Thermal Resistance	$R_{\theta JC}$	(Single)	1.36	°C/W
Max. Junction Temperature	T_J	-	-65 to +100	°C
Max. Storage Temperature	T _{stg}	-	-65 to +100	°C

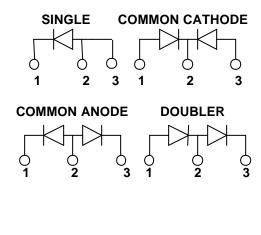
Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 7.5A, Pulse, T _J = 25 °C	0.46	V
		(per leg)		
	V_{F2}	@ 7.5A, Pulse, T _J = 125 °C	0.42	V
		(per leg)		
Max. Reverse Current	I _{R1}	@V _R = 15V, Pulse,	3.5	μΑ
		$T_J = 25$ °C (per leg)		
	I _{R2}	@V _R = 15V, Pulse,	170	mA
		T _J = 125 °C (per leg)		
Max. Junction Capacitance	C _T	$@V_R = 5V, T_C = 25 ^{\circ}C$	600	pF
		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p) (per leg)}$		

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Mechanical Dimensions: In Inches / mm





TO-258

PINOUT TABLE

TYPE	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



TECHNICAL DATA

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