

TECHNICAL DATA DATA SHEET 5364, REV. -

# HERMETIC FAST RECOVERY RECTIFIER HIGH VOLTAGE

#### Features:

- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- Very High Surge Capacity
- Very suitable for medium to high frequency applications (upto 40 kHz)
- Soft Reverse Recovery at Low and High Temperature
- Trr guaranteed lower than 0.5μsec
- For ceramic seals use part number prefix SHDC
- Different Lead-bend options available
- Electrically / Mechanically Stable during and after Packaging

# **Maximum Ratings:**

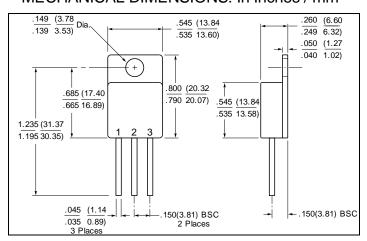
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	1200	V
Max. Average Forward	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave	32	Α
Current	` ′	form, $T_C = 65 ^{\circ}C$		
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 msec, sine pulse, per leg	300	Α
Thermal Resistance per leg	$Z_{TH}$	T <sub>C</sub> = 25 °C	1.40	°C / W
Max. Junction Temperature	T <sub>J</sub>	-	- 55 to + 150	°C
Max. Storage Temperature	T <sub>stg</sub>	-	- 55 to + 150	°C

# **Electrical Characteristics:**

Characteristics	Symbol	Condition	Тур.	Max.	Units
Max. Forward Voltage Drop	ax. Forward Voltage Drop V <sub>F1</sub> @ 9A, Pulse		1.15	1.25	V
		@ 32A, Pulse, T <sub>J</sub> = 25 °C	1.75	1.85	
	$V_{F2}$	@ 9A, Pulse, T <sub>J</sub> = 125 °C	-	1.18	V
		@ 32A, Pulse, T <sub>J</sub> = 125 °C	-	1.75	
Max. Reverse Current	I <sub>R1</sub>	$@V_R = 1200V, Pulse, T_J = 25 °C$	2	50	μΑ
	I <sub>R2</sub>	$@V_R = 1200V, Pulse, T_J = 125 °C$	-	500	μΑ
Reverse Recovery Time	$T_RR$	$I_F = 0.5A$ ; $I_{RM} = 1A$ , $I_{RR} = 0.25A$	0.3	0.5	μS
		$T_J = 25  ^{\circ}C$			
Capacitance	CJ	$V_R = 5V$ , $f = 1MHz$ , $V_{SIG} = 1V$	-	150	рF

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## MECHANICAL DIMENSIONS: In Inches / mm



### TO-254

#### **PINOUTS**

DEVICE 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	ANODE/CATHODE	CATHODE

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