SENSITRON SEMICONDUCTOR

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 Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form, T_C = 65 °C	32	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 msec, sine pulse, per leg	300	A
Thermal Resistance per leg	Z_{TH}	T_C = 25 °C	1.40	°C / W
Max. Junction Temperature	T_J	-	- 55 to + 150	°C
Max. Storage Temperature	T_{stg}	-	- 55 to + 150	°C

Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 9A, Pulse, T_J = 25 °C	1.15	1.25	V
		@ 32A, Pulse, T_J = 25 °C	1.75	1.85	
	V_{F2}	@ 9A, Pulse, T_J = 125 °C	-	1.18	V
		@ 32A, Pulse, T_J = 125 °C	-	1.75	
Max. Reverse Current	I_{R1}	@V_R = 1200V, Pulse, T_J = 25 °C	2	50	μA
	I_{R2}	@V_R = 1200V, Pulse, T_J = 125 °C	-	500	μA
Reverse Recovery Time	T_{RR}	I_F = 0.5A; I_{RM} = 1A, I_{RR} = 0.25A T_J = 25 °C	0.3	0.5	μs
Capacitance	C_J	V_R = 5V, f = 1MHz, V_{SIG} = 1V	-	150	pF

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SHD325589
SHD325589P
SHD325589N
SHD325589D

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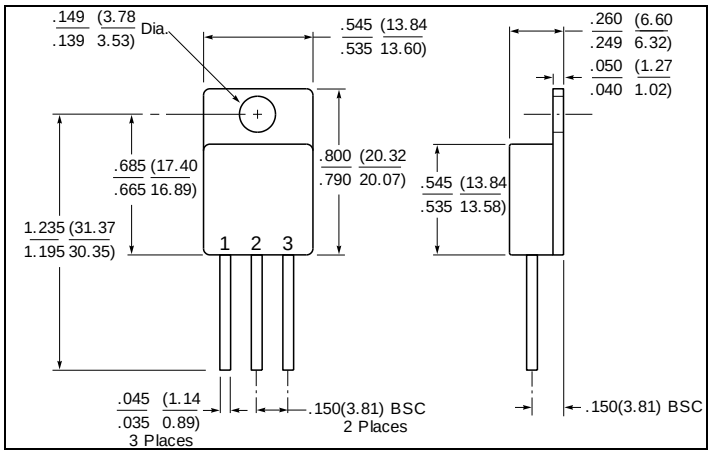
MECHANICAL DIMENSIONS: In Inches / mm



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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