SF5400 THRU SF5408

SINTERED GLASS JUNCTION
ULTRAFAST AVALANCHE RECTIFIER

VOLTAGE：50 to 1000V **CURRENT: 3.0A**

GULF SBMI

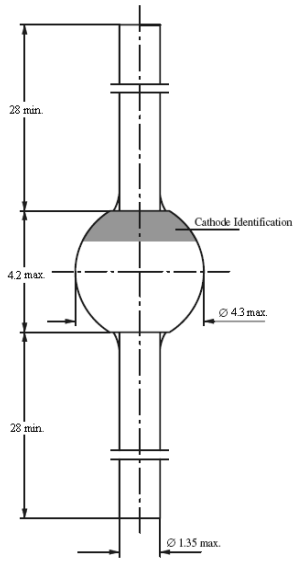
FEATURE

Glass passivated
Hermetically sealed package
Low reverse current
High reverse voltage

MECHANICAL DATA

Case: SOD-64 sintered glass case
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Polarity: color band denotes cathode end
Mounting position: any

SOD-64



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SF5 400	SF5 401	SF5 402	SF5 403	SF5 404	SF5 405	SF5 406	SF5 407	SF5 408	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	V
Minimum Reverse Breakdown Voltage IR = 100μA	$V_{(BR)R}$	60	110	220	330	440	550	660	880	1100	V
Maximum Average Forward Rectified Current 3/8"lead length	I_{FAV}	3.0									A
Peak Forward Surge Current at tp=10ms,half sinewave	I_{FSM}	150									A
Maximum Forward Voltage at rated Forward Current	V_F	1.1					1.7				V
Non-repetitive peak reverse avalanche energy at $I_{BR(R)}$=0.4A	E_{RSM}	10									mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I_R	5.0 50.0									μA
Maximum Reverse Recovery Time (Note 1)	Trr	50					75				nS
Typical Thermal Resistance (Note 2)	Rth(ja)	70									K/W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +175									°C

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. on PC board with spacing 25 mm

RATINGS AND CHARACTERISTIC CURVES SF5400 THRU SF5408

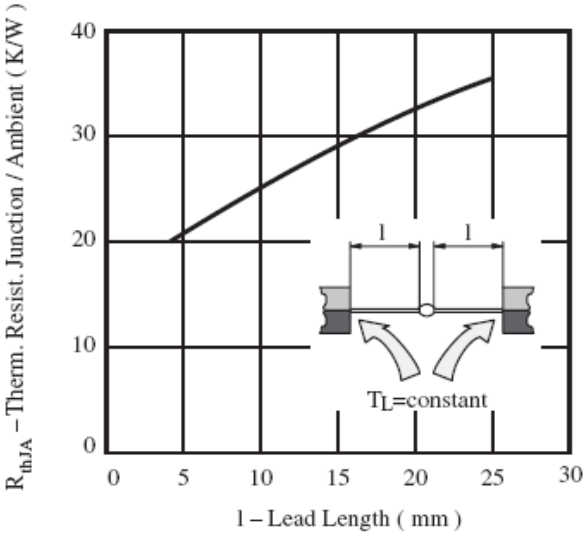


Figure 1. Max. Thermal Resistance vs. Lead Length

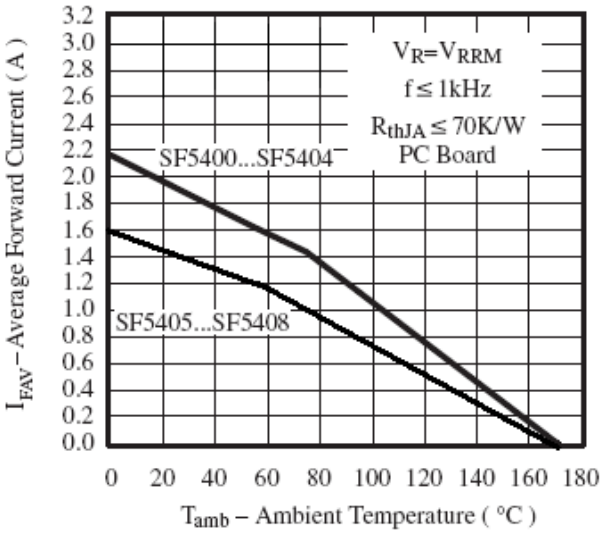


Figure 2. Max. Average Forward Current vs. Ambient Temperature

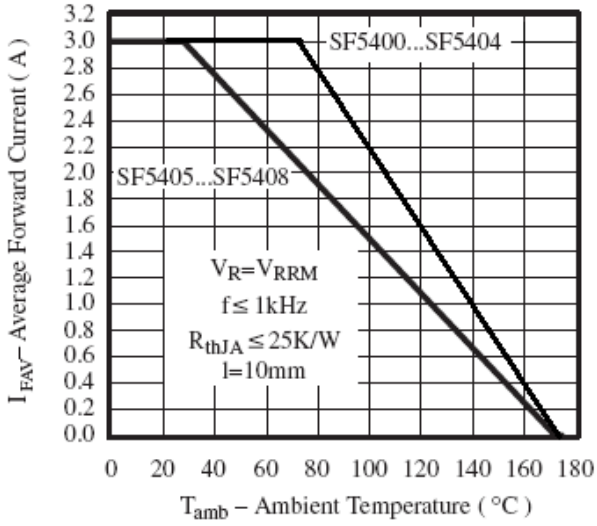


Figure 3. Max. Average Forward Current vs. Ambient Temperature

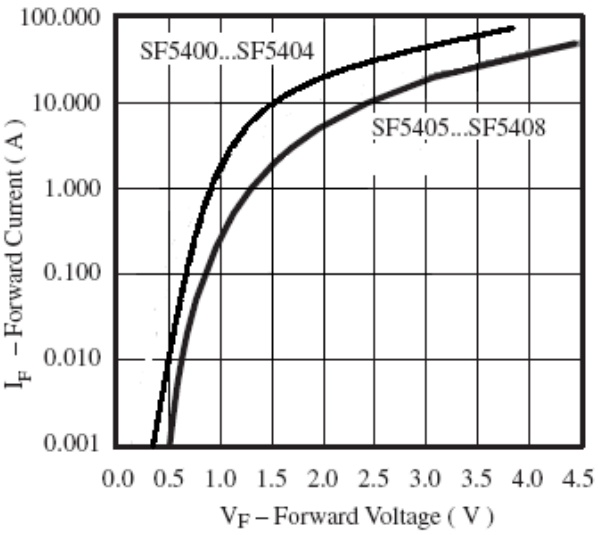


Figure 4. Max. Forward Current vs. Forward Voltage

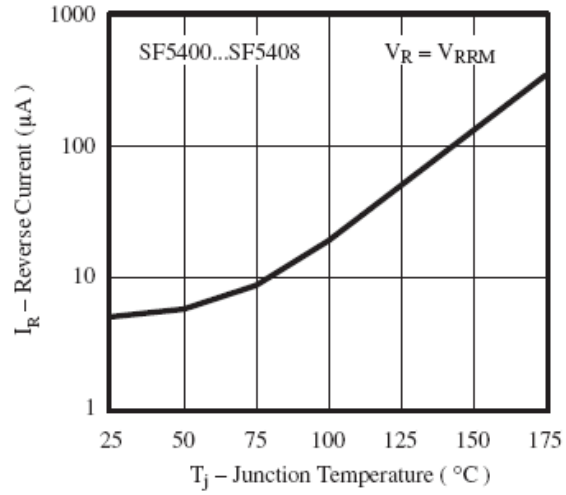


Figure 5. Max. Reverse Current vs. Junction Temperature

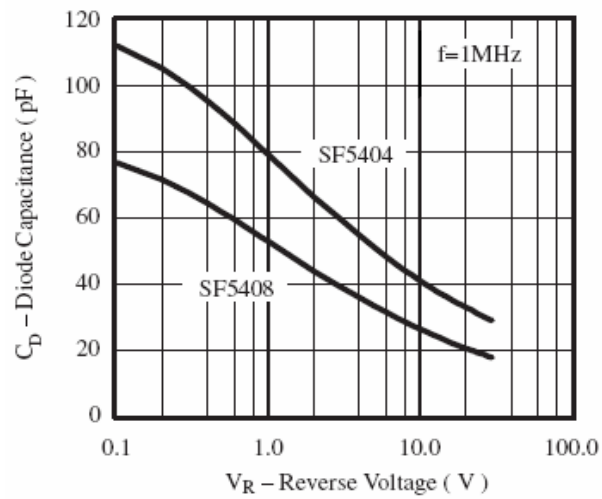


Figure 6. Diode Capacitance vs. Reverse Voltage