

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**Micro Commercial Components** 

RoHS

Micro Commercial Components 20736 Marilla Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 SF61 THRU SF66

# **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
   Halogen free available upon request by adding suffix "-HF"
   High current capability, High reliability
   Low forward voltage drop
   High surge current capability

### **Maximum Ratings**

Operating Temperature: -65 to +125 Storage Temperature: -65 to +150

For capacitive load, derate current by 20%

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SF61	50	35	50
SF62	100	70	100
SF63	150	105	150
SF64	200	140	200
SF65	300	210	300
SF66	400	280	400

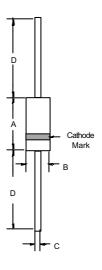
### Electrical Characteristics @ 25 C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	6.0A	T <sub>C</sub> = 55
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SF61-SF64 SF65-SF66	V <sub>F</sub>	0.975V 1.3V	I <sub>FM</sub> = 6.0A; T <sub>C</sub> = 25
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0uA 50uA	T <sub>C</sub> = 25 T <sub>C</sub> = 100
Typical Junction Capacitance SF61-SF64 SF65-SF66	Сл	120pF 60pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V
Maximum Reverse Recovery Time	$T_RR$	35nS	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

## 6.0 Amp Super Fast Rectifier 50 to 400 Volts

### **DO-201AD**



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α		.370		9.50	
В		.250		6.40	
С	.048	.052	1.20	1.30	
D	1.000		25.40		,

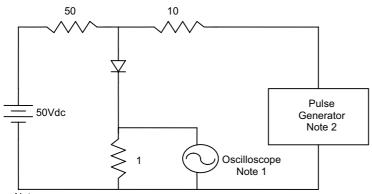
<sup>2.</sup> Pulse Test: Pulse width 300 usec, Duty cycle 1%.

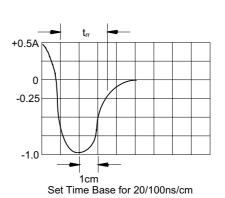


### SF61 thru SF66

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Figure1
Reverse Recovery Time Characteristic And Test Circuit Diagram





Notes:

Figure 2

0

- 1. Rise Time = 7ns max.
- Input impedance = 1 megohm, 22pF
- 2. Rise Time = 10ns max.
- Source impedance = 50 ohms

3. Resistors are non-inductive

Forward Derating Curve

Ambient Temperature - C

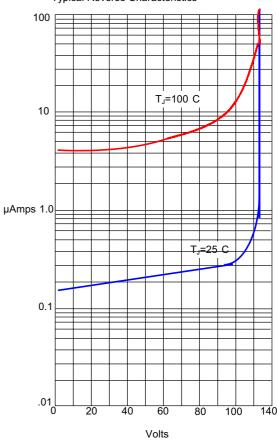
Single Phase, Half Wave 60Hz Resistive or Inductive Load

Amps

20

0 25 50 75 100 125 150 Average Forward Rectified Current Per Leg - Amperes *versus* 

Figure 3
Typical Reverse Characteristics

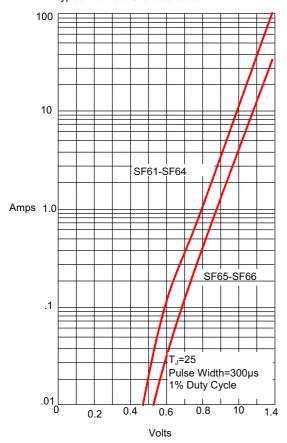


Instantaneous Reverse Leakage Current -MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts



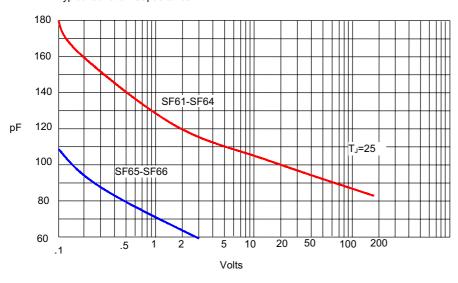
### SF61 thru SF66

Figure 4
Typical Forward Characteristics



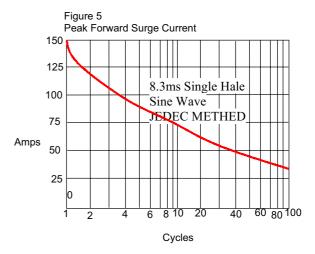
Instantaneous Forward Current - Amperes *versus* Forward Voltage - Volts

Figure 6
Typical Junction Capacitance



Junction Capacitance – pF Reverse Voltage - Volts

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Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles



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#### Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel	
Part Number-AP	Ammo Packing: 1.2 Kpcs/Ammo Box	
Part Number-BP	Bulk: 12 Kpcs/Carton	

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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