

COMPLIAN

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SF61 THRU SF66

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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

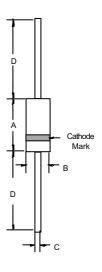
Average Forward Current	$I_{F(AV)}$	6.0A	T _C = 55
Peak Forward Surge Current	I _{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SF61-SF64 SF65-SF66	V _F	0.975V 1.3V	I _{FM} = 6.0A; T _C = 25
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5.0uA 50uA	T _C = 25 T _C = 100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

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

2. Pulse Test: Pulse width 300 usec, Duty cycle 1%.

6.0 Amp Super Fast Rectifier 50 to 400 Volts

DO-201AD



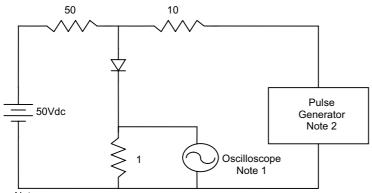
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α		.370		9.50	
В		.250		6.40	
С	.048	.052	1.20	1.30	
D	1.000		25.40		,

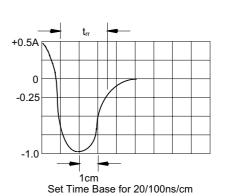


SF61 thru SF66

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Figure1
Reverse Recovery Time Characteristic And Test Circuit Diagram





Notes:

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

Figure 2 Forward Derating Curve

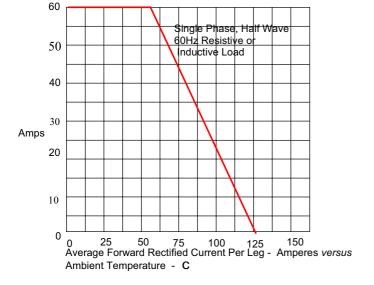
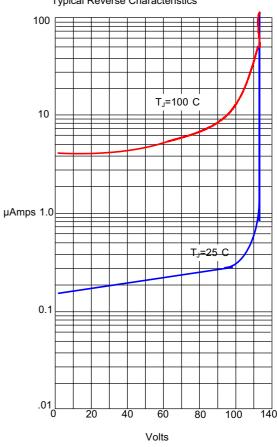


Figure 3
Typical Reverse Characteristics

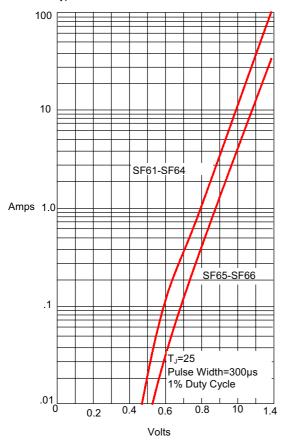


Instantaneous Reverse Leakage Current -MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts



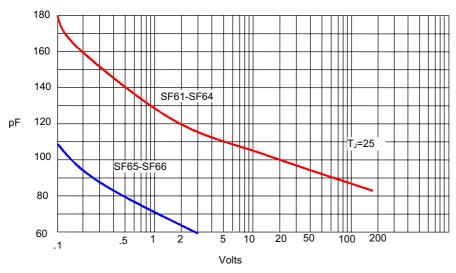
SF61 thru SF66

Figure 4
Typical Forward Characteristics



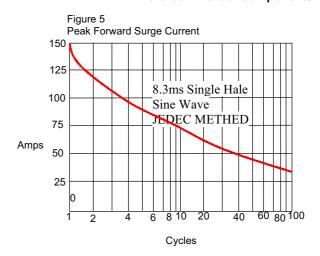
Instantaneous Forward Current - Amperes *versus* Forward Voltage - Volts

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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