

Micro Commercial Components

Features

- Fast Switching Speed
- Marking : Type Number
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant See ordering information)

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Fax:

- Compliant. See ordering information)
 Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55℃ to +125℃
- Storage Temperature: -55℃ to +150℃
- Typical Thermal Resistance: 50.0°C/W Junction To Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SF11	50V	35V	50V
SF12	100V	70V	100V
SF13	150V	105V	150V
SF14	200V	140V	200V
SF15	300V	210V	300V
SF16	400V	280V	400V
SF18	600V	420V	600V

Electrical Characteristics @ 25 $^\circ\!\mathrm{C}$ Unless Otherwise Specified

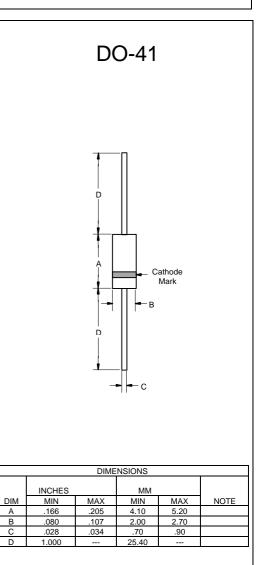
Average Forward Current	I _{F(AV)}	1.0A	T _A = 55 °C
Peak Forward Surge Current	I_{FSM}	30.0A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SF11-SF14 SF15-SF16 SF18	VF	0.95V 1.30V 1.70V	I _{FM} = 1.0A
Maximum DC Reverse Current At Rated DC Blocking Voltage	Ι _R	5.0uA 100uA	T _A = 25°C T _A = 100°C
Maximum Reverse Recovery Time	T _{RR}	35.0nS	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A
Typical Junction Capacitance SF11-SF14 SF15-SF18	CJ	40pF 25pF	Measured at 1.0MHz, V _R =4.0V

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

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SF11 Thru SF18

1.0 Amp Super Fast Recovery Rectifiers 50 to 600 Volts

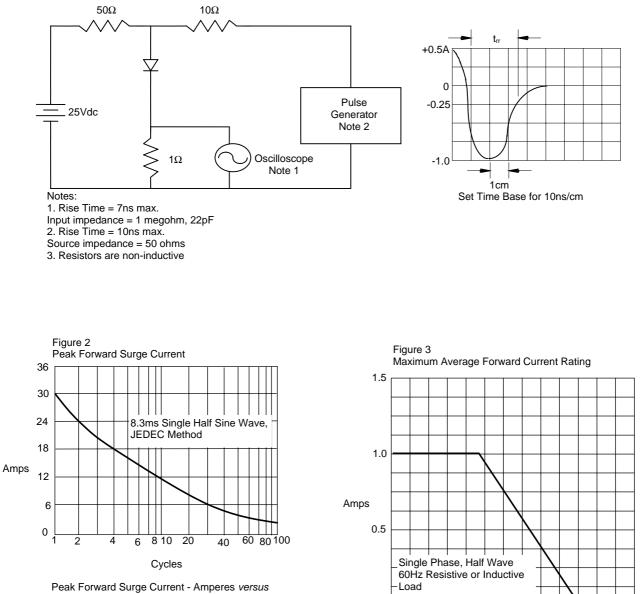




SF11 thru SF18

Figure 1

Reverse Recovery Time Characteristic And Test Circuit Diagram



Number Of Cycles At 60Hz - Cycles

75

100

125

150

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0 0

25

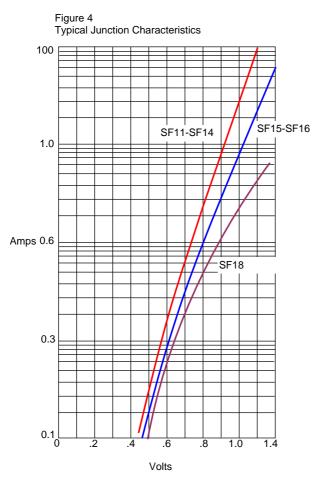
50

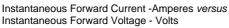
 $^{^{\}rm C}$ Average Forward Rectified Current Per Leg - Amperes versus Ambient Temperature - $^{\rm C}$

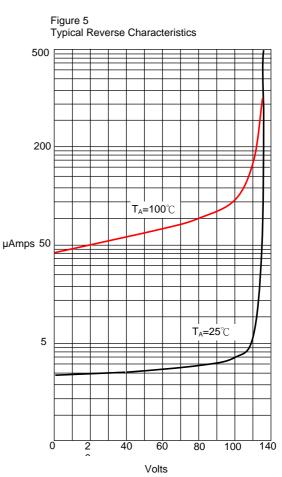


SF11 thru SF18

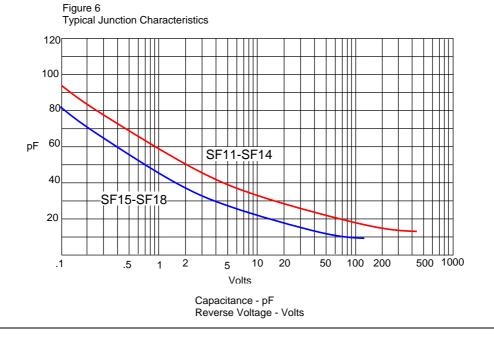
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Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - %Volts



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Ordering Information :

Device	Packing	
Part Number-TP	Tape&Reel: 5Kpcs/Reel	
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box	
Part Number-BP	Bulk: 50Kpcs/Carton	

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