

SF21-SF28

SUPER FAST RECTIFIERS

Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar

solvents

- The plastic material carries U/L recognition 94V-0
- RoHS compliant package

Mechanical Characteristics

- Terminals: Axial lead ,solderable per MIL-

STD-202,Method 208

- Polarity: Color band denotes cathode
- Weight: 0.014 ounces,0.39 grams
- Mounting position: Any

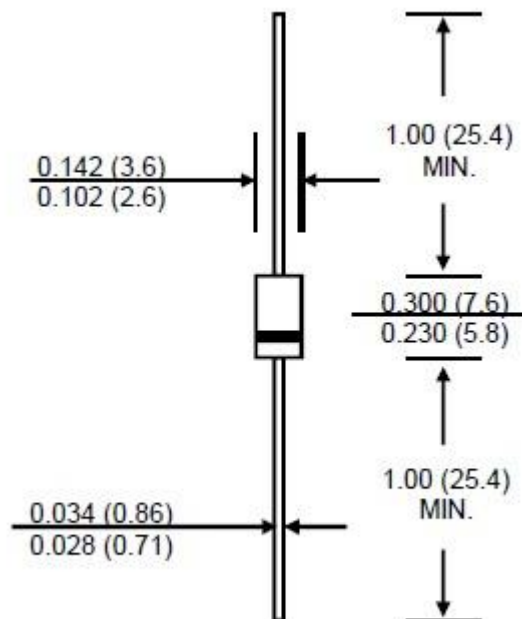
Package type : DO-15

Packing & Order Information

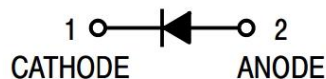
3,000/T



**RoHS
COMPLIANT**



Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

	Symbol	SF21	SF22	SF23	SF24	SF25	SF26	SF27	SF28	Unit
Maximum recurrent peak reverse voltage	VRRM	50	100	150	200	300	400	500	600	V
Maximum RMS voltage	VRMS	35	70	105	140	210	280	350	420	V
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	500	600	V
Maximum average forward rectified Current 9.5mm lead length, @TA=75°C	IF(AV)	2.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @TJ=125°C	IFSM	50								A

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Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

	Symbol	SF21	SF22	SF23	SF24	SF25	SF26	SF27	SF28	Unit
Maximum instantaneous forward voltage @ 2.0A	VF	0.95			1.25		1.7			V
Maximum reverse current @ TA=25°C at rated DC blocking voltage @ TA=125°C	IR				5.0 50.0					µA
Maximum reverse recovery time (Note 1)	Trr				35					ns
Typical junction capacitance (Note 2)	CJ	60					30			pF
Typical thermal resistance (Note 3)	RθJA				20					°C/W
Operating junction temperature range	TJ				-55 to +125					°C
Storage temperature range	TSTG				-55 to +150					°C

NOTE:

1. Measured with IF=0.5A, IR=1A, Irr=0.25A.
2. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.
3. Thermal resistance from junction to ambient.

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■ RATINGS AND CHARACTERISTIC CURVES

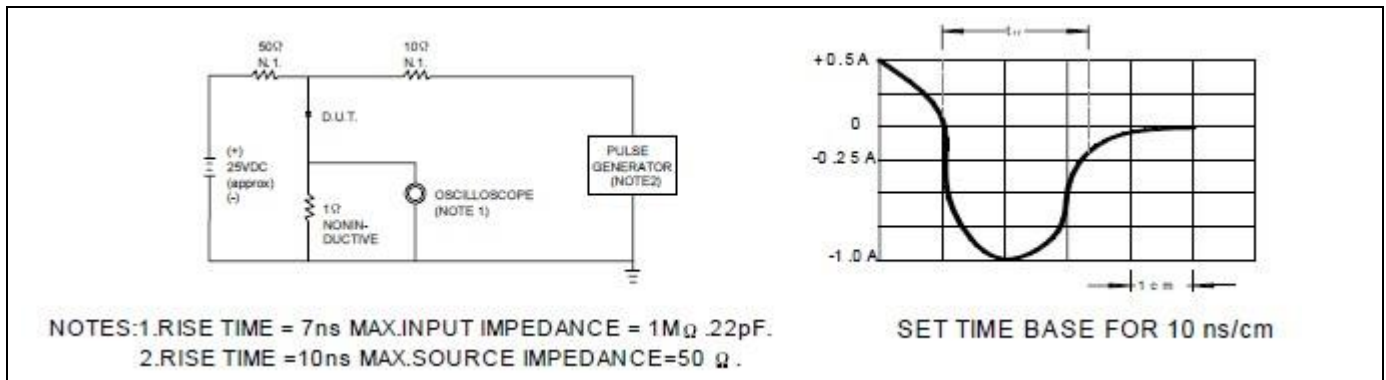


Figure 1. TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

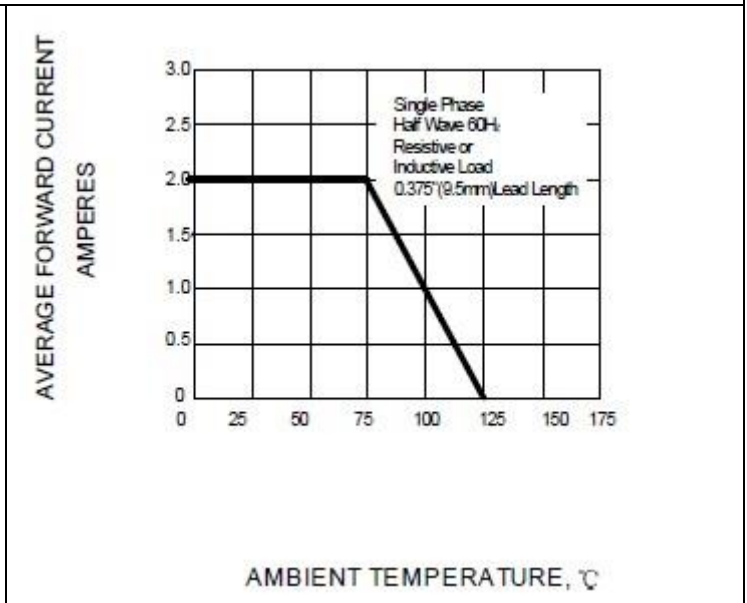
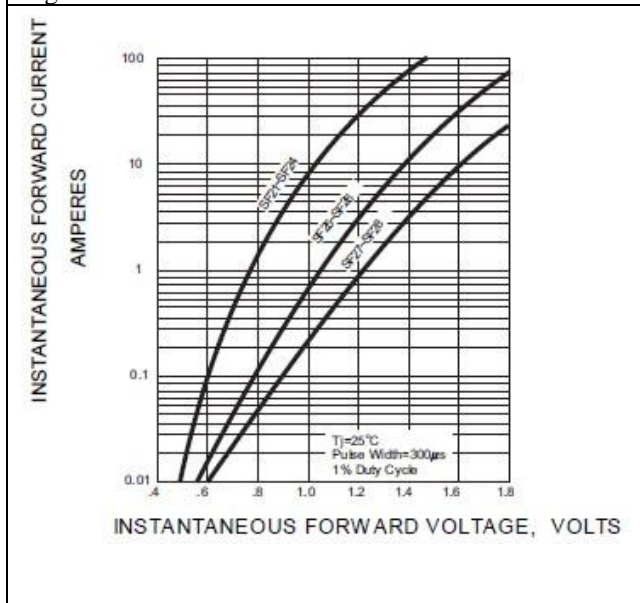


Figure 2. TYPICAL FORWARD CHARACTERISTIC

Figure 3. FORWARD DERATING CURVE

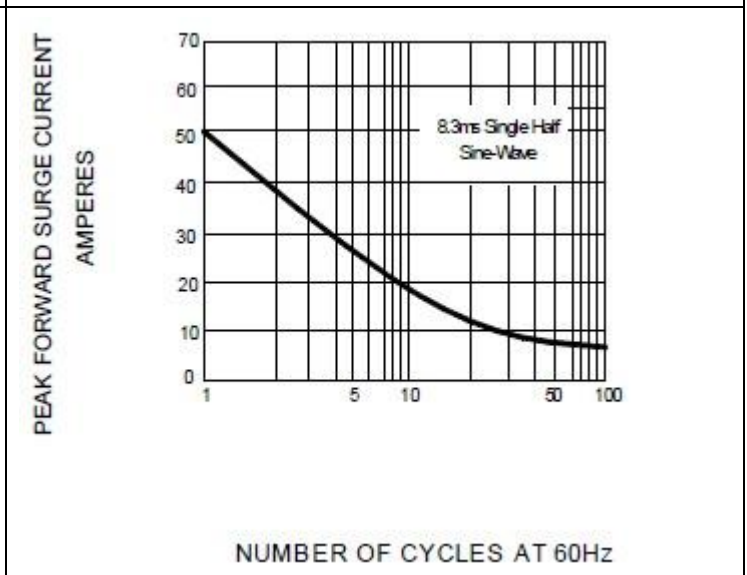
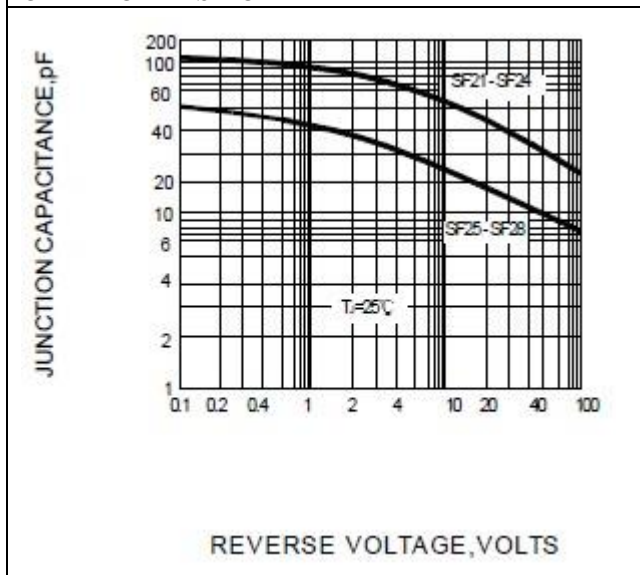


Figure 4. TYPICAL JUNCTION CAPACITANCE

Figure 5. PEAK FORWARD SURGE CURRENT

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