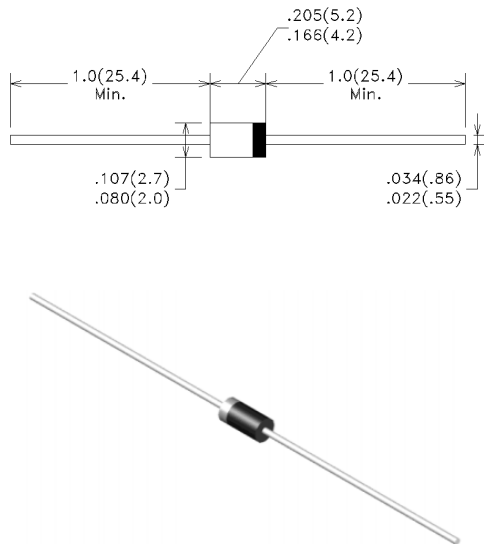


Package Outline Dimensions in mm (inches)

DO-41



Reverse Voltage – 100 to 600 V

Forward Current – 1 A

Features

- High reliability
- Low forward voltage drop
- Ultrafast Recovery times for high efficiency
- Low leakage current
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Typical Applications

- For use in switching power Supplies.

Mechanical Data

- Case:DO-41 Plastic Package
- Polarity:Color band denotes cathode end

Maximum ratings

Ratings at TA=25°C (unless otherwise specified)

Parameter	Symbol	SF12	SF14	SF16	SF18	Unit
Maximum recurrent peak reverse voltage	VRRM	100	200	400	600	V
Maximum RMS voltage	VRMS	70	140	280	420	V
Maximum DC blocking voltage	VDC	100	200	400	600	V
Maximum average forward rectified current	IF(AV)	1.0				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30				A
Storage temperature range	TS	-55 ~ 150				°C
Operating Junction temperature range	Tj	-55 ~ 150				°C
Thermal Resistance	RthJA	65				°C /W

Electrical characteristics

Ratings at TA=25°C (unless otherwise specified)

Parameter	Test Conditions	Symbol	SF12	SF14	SF16	SF18	Unit
Maximum forward voltage	IF=1.0 A	VF	1.00	1.00	1.25	1.70	V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	2.0				μA
	TA=100°C		100				
Maximum Reverse Recovery Time	RG1	Trr	35				ns

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

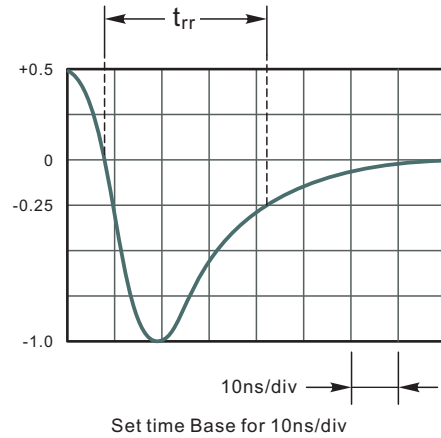
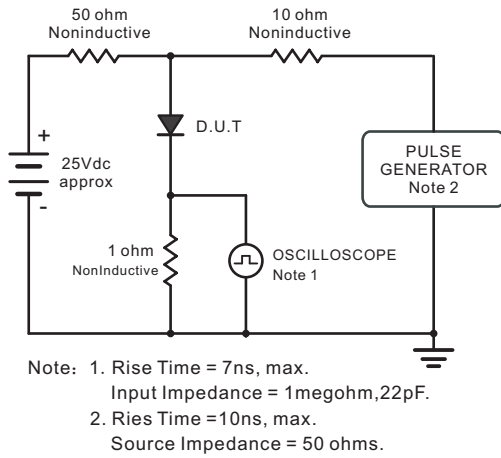


Fig.2 Maximum Average Forward Current Rating

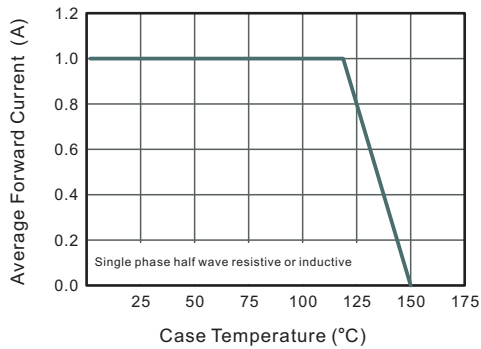


Fig.3 Typical Reverse Characteristics

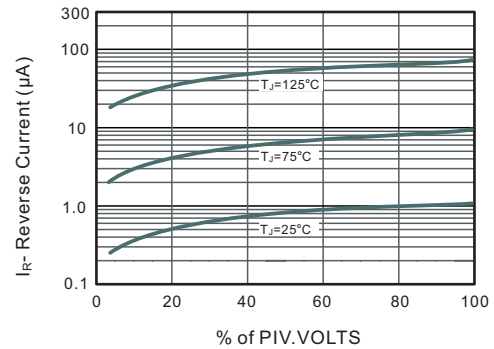


Fig.4 Typical Forward Characteristics

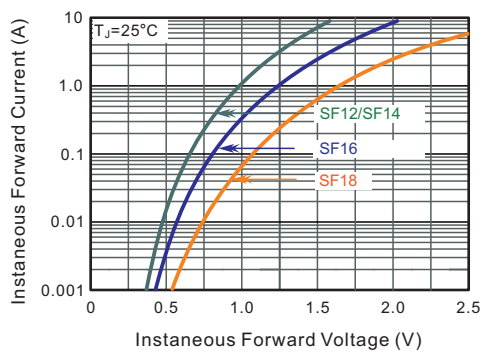


Fig.5 Typical Junction Capacitance

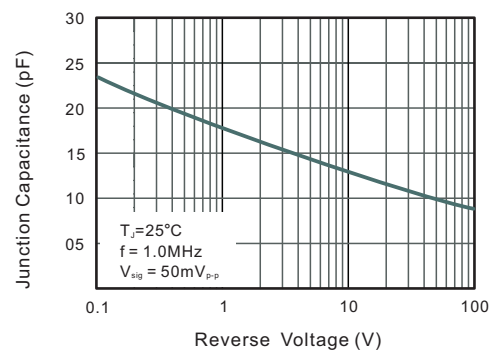


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

