

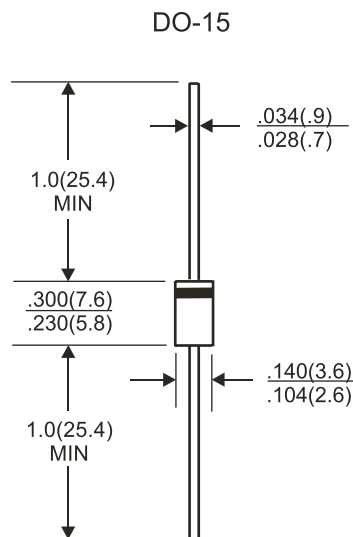


Features

- Diffused junction
- Fast switching for high efficiency
- High current capability and low Forward Voltage Drop
- Surge overload rating to 60A peak
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

Mechanical Data

Case: Molded plastic
Terminals: Solder plated solderable per MIL-STD-202,
Method 208
Polarity: Cathode band
Mounting Position: Any
Weight: 0.4 grams (approx)



Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	SF21	SF22	SF23	SF24	SF25	SF26	SF27	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	600	V
Maximum RMS bridge input voltage	VRMS	35	70	105	140	210	280	420	v
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	600	v
Maximum average forward rectified output current at TA=55°C	IF(AV)	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	60							A
Maximum reverse recovery time TJ=25°C	Trr	35							nS
Typical thermal resistance per element	ReJA	40							°C/W
Typical junction capacitance per element	Cj	60							pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	SF21	SF22	SF23	SF24	SF25	SF26	SF27	Unit
Maximum instantaneous forward voltage drop per leg at 2.0A	VF	0.95				1.25		1.50	V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 100							μA

Rating and Characteristic Curves (TA=25°C Unless otherwise noted) SF21 thru SF27

Fig. 1 Reverse Recovery Time and Test Circuit Diagram

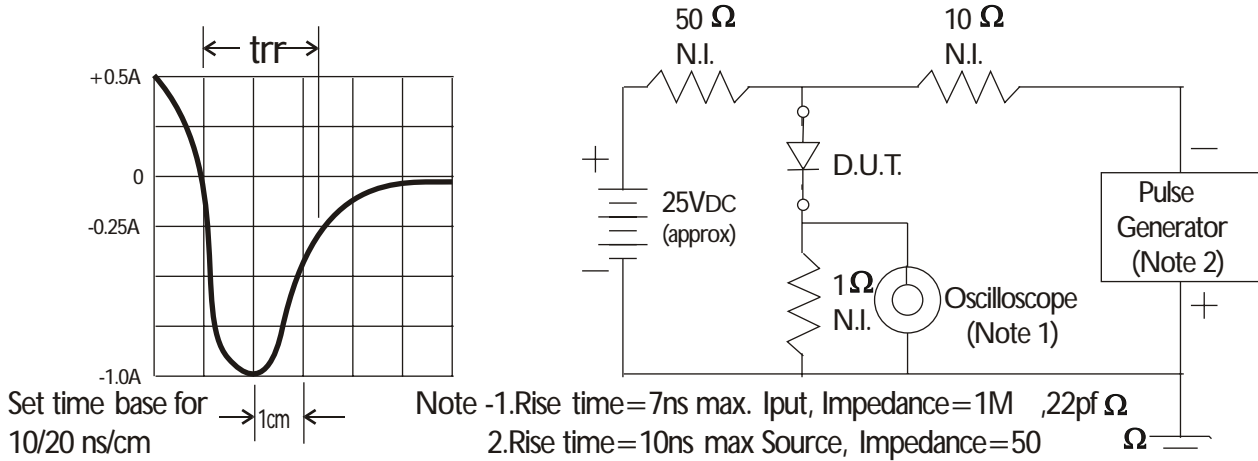


Fig. 2 Derating Curve for Output Rectified Current

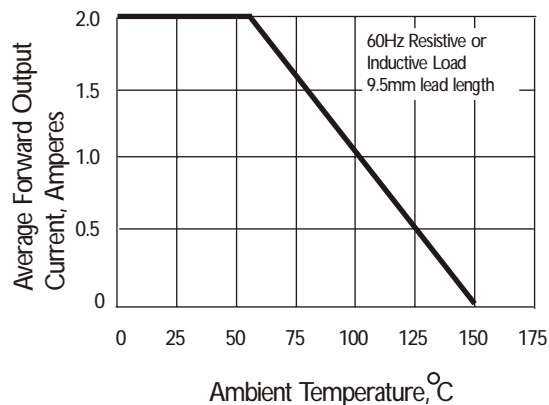


Fig. 3 Peak Forward Surge Current

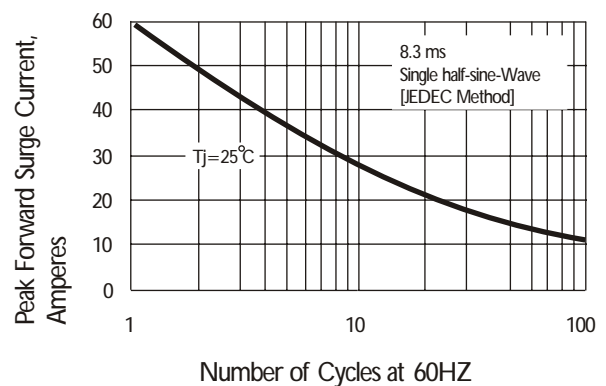


Fig. 4 Typical Instantaneous Forward Characteristics

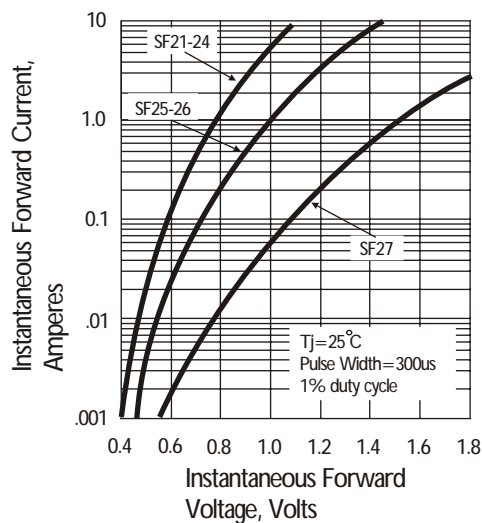


Fig. 5 Typical Junction Capacitance

