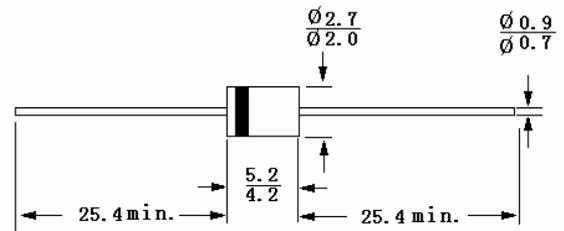




Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- High surge capability
- Low forward voltage, high current capability
- Hermetically sealed
- Super-fast recovery times
- Low leakage

DO-41



Dimensions in mm

Mechanical Data

- **Case:** DO-41 molded plastic
- **Terminals:** Axial Leads, solderable per MIL-STD-202, method 208 guaranteed
- **Polarity:** Colored band denotes cathode end
- **Mounting position:** Any

Absolute Maximum Ratings and Characteristics

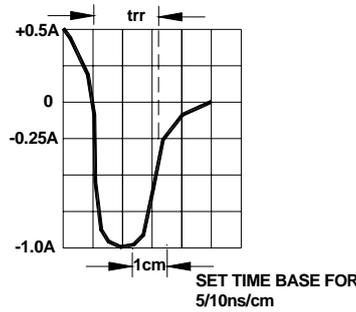
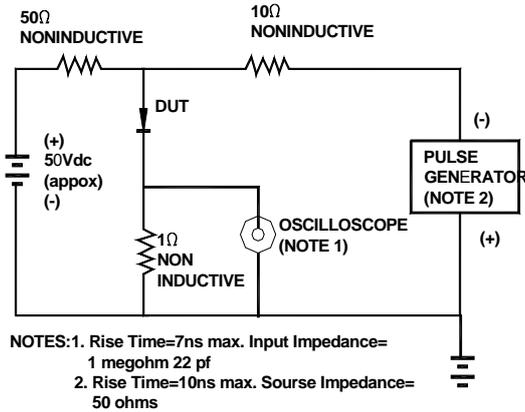
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load, for capacitive load, derate current by 20%.

	Symbols	SF11	SF12	SF13	SF14	SF15	SF16	SF18	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length at $T_A = 55^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A	V_F	0.95			1.25		1.7		V
Maximum Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	I_R	5.0 500							μA
Maximum Reverse Recovery Time (note1)	T_{RR}	35						50	nS
Typical Junction Capacitance(note2)	C_J	50				25			pF
Typical Thermal Resistance(note3)	$R_{\theta JA}$	50							$^\circ\text{C/W}$
Operating Junction Temperature	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +150							$^\circ\text{C}$

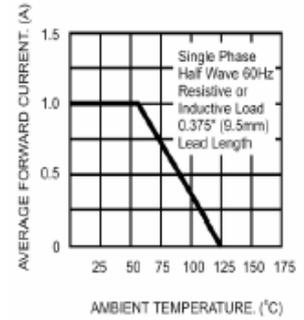
Notes: 1.Reverse recovery test conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

2.Measured at 1.0MHz and applied reverse voltage of 4.0V

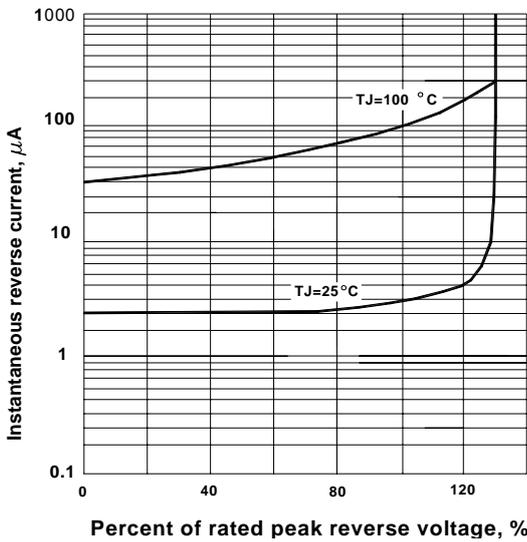
3.Thermal resistance from junction to ambient 0.375" (9.5mm) lead length P.C.B mounted.



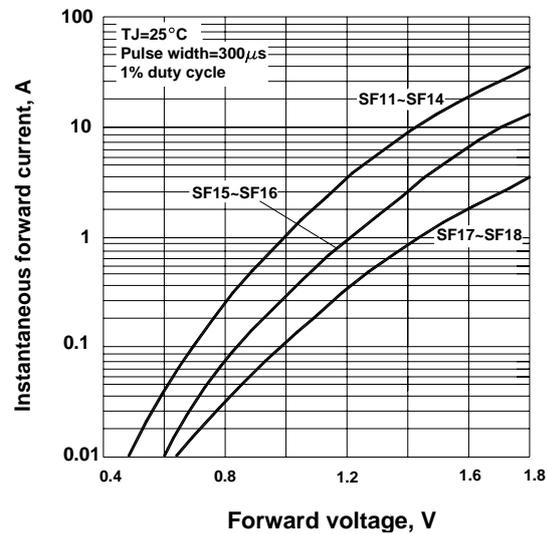
MAXIMUM AVERAGE FORWARD CURRENT DERATING



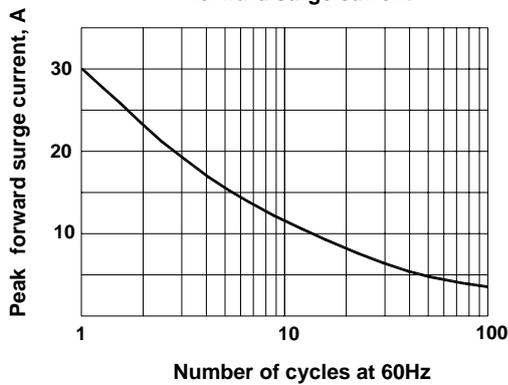
Typical reverse characteristics



Typical forward characteristics



Maximum non-repetitive forward surge current



Typical junction capacitance

