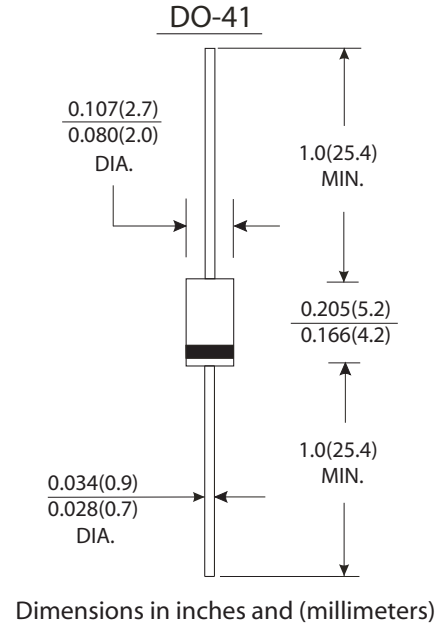


Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Super fast recovery time
- Good for use in switching mode circuits
- Plastic package has Underwrites Laboratory Flammability Classification 94V-0

Mechanical Data

- Case : JEDEC DO-41 molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.012 ounce, 0.34 gram



Maximum Ratings And Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	SF11	SF12	SF13	SF14	SF15	SF16	SF17	Units	
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	Volts	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	Volts	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	Volts	
Maximum average forward rectified current 0.375"(9.5mm) lead length at TA=55°C	I <sub(av)< sub=""></sub(av)<>	1.0							Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30.0							Amps	
Maximum instantaneous forward voltage at 1.0A	V _F	0.95			1.25		1.70		Volts	
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	5.0							μ A	
	TA=100°C	100								
Maximum reverse recovery time (Note 1)	T _{rr}	35							ns	
Typical junction capacitance (Note 2)	C _J	50				25				pF
Operating junction and storage temperature range	T _J	-55 to +125							°C	
	T _{STG}	-55 to +150								

Notes:

- (1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES SF11 THRU SF17

FIG. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

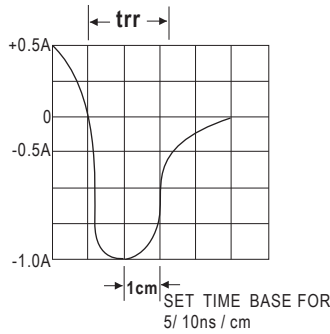
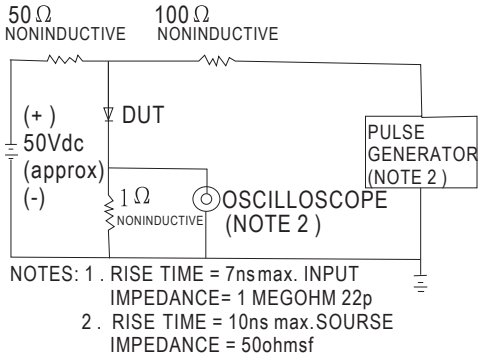


FIG. 2 - MAXIMUM AVERAGE FORWARD CURRENT DERATING

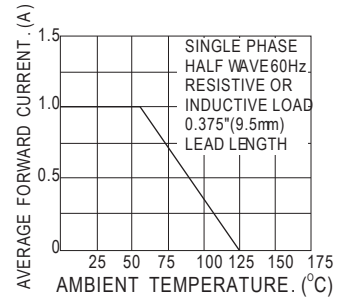


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

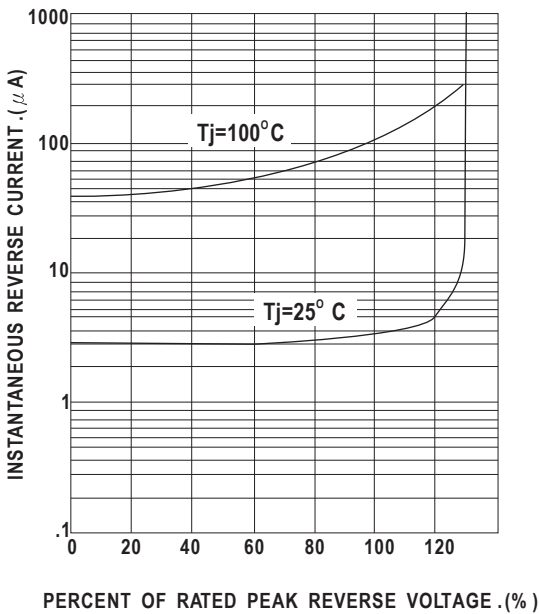


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

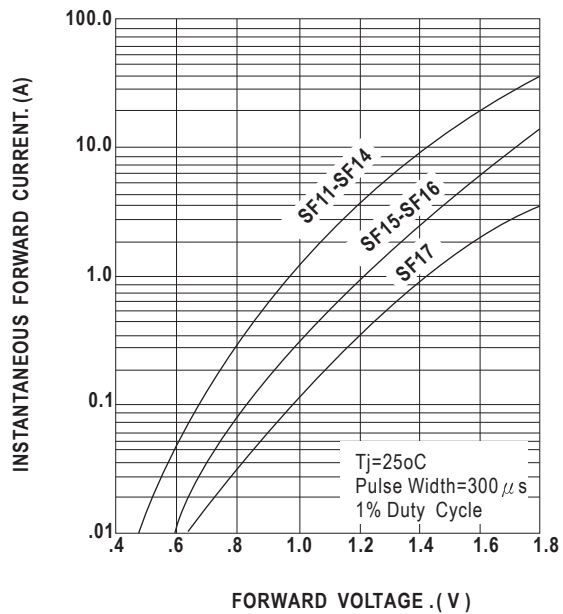


FIG. 5 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

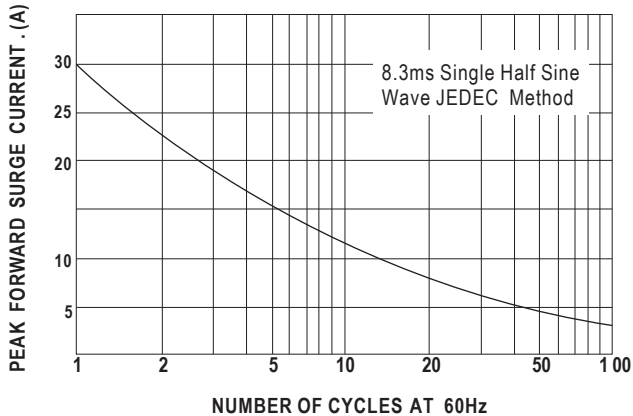


FIG. 6 - TYPICAL REVERSE CHARACTERISTICS

