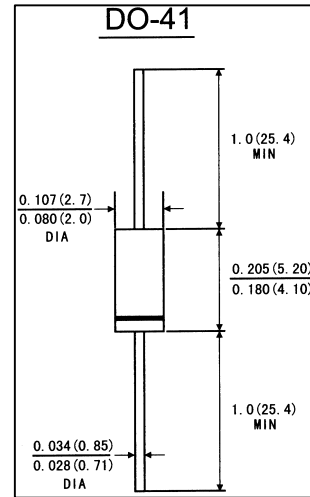


FEATURES

- . Low forward voltage drop
- . High current capability
- . High reliability
- . High surge current capability
- . Ultra-fast switching speed
- . Good for use in switching mode circuits

MECHANICAL DATA

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



Dimensions in inches and (millimeters)

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 current by 20%)

	Symbols	SF11	SF12	SF13	SF14	SF15	SF16	Units
Maximum Recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	Volts
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	Volts
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	Volts
Maximum average forward rectified current 0.375"(9.5mm)lead length at T _A =55°C	I _(AV)	1.0						Amp
Peak forward surge current (8.3ms single half sing wave superimposed on rated load (JEDEC method)	I _{FSM}	30.0						Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	0.95			1.25			Volts
Maximum DC reverse current at rated DC Blocking Voltage	T _A =25°C	5.0						μ A
	T _A =150°C	50						
Typical reverse recovery time(Note 1)	T _{rr}	35						ns
Typical junction capacitance(Note 2)	C _J	15			10			pF
Operating and storage temperature range	T _J T _{STG}	-65 to +150						°C

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 SF16

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

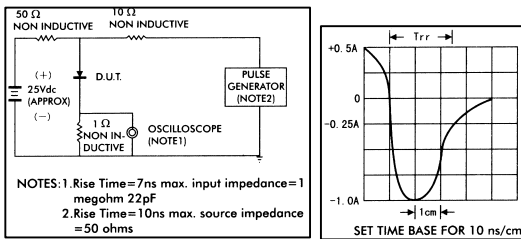


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

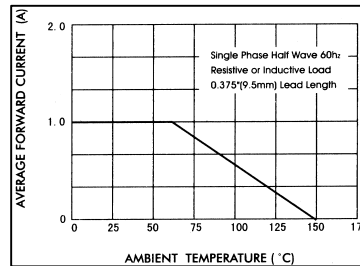


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

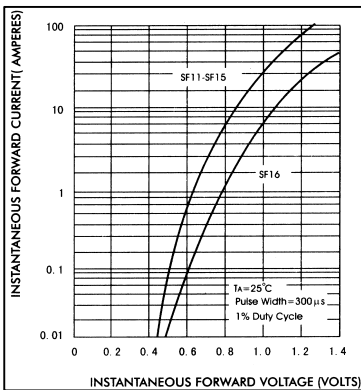


FIG.4-TYPICAL REVERSE CHARACTERISTICS

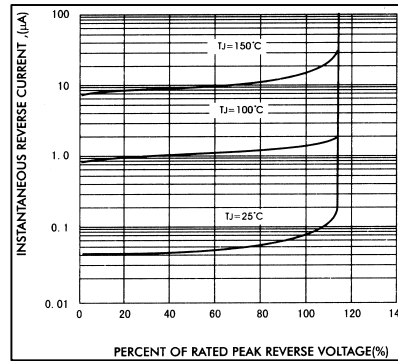


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

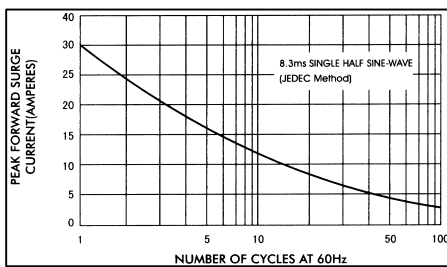


FIG.6-TYPICAL JUNCTION CAPACITANCE

