

UNO International Corp.

SF11 THRU SF16 SUPER FAST SWITCHING PLASTIC RECTIFIER

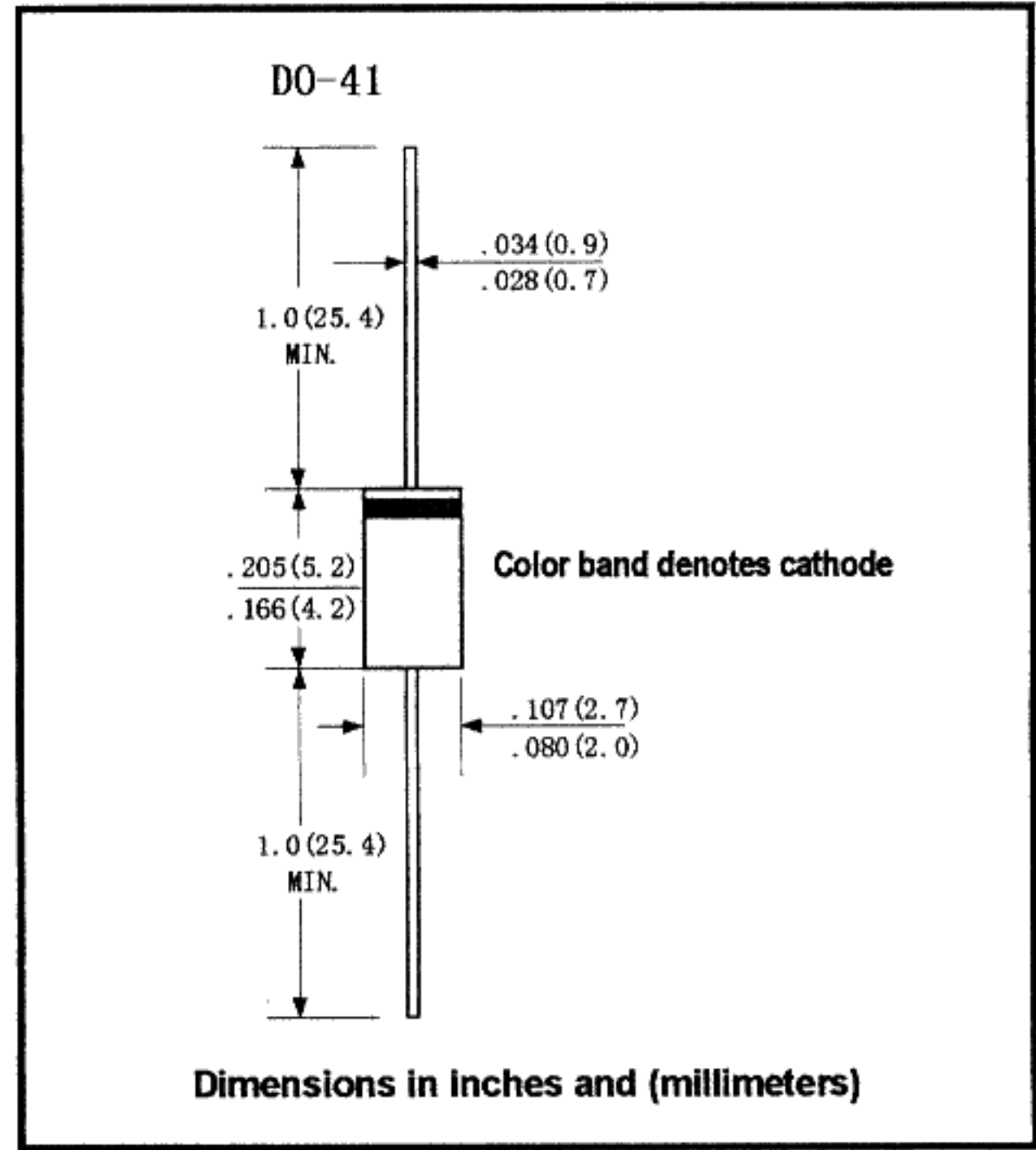
VOLTAGE: 50 TO 400V CURRENT: 1.0A

FEATURE

- Molded case feature for auto insertion
- Super Fast switching for high efficiency
- High current capability
- Low leakage current
- High surge capability
- High temperature soldering guaranteed:
250°C/10sec/0.375"(9.5mm) lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0
recognized flame retardant epoxy
Polarity: Color band denotes cathode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	SF11	SF12	SF13	SF14	SF15	SF16	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	V
Maximum Average Forward Rectified Current ($T_a=55^\circ\text{C}$)	$I_{F(AV)}$	1.0						A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I_{FSM}	30						A
Maximum Instantaneous Forward Voltage (at rated forward current)	V_F	0.95			1.25			V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ (at rated DC blocking voltage) $T_a=100^\circ\text{C}$	I_R	5.0						μA
		100						μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35						nS
Typical Junction Capacitance (Note 2)	C_J	10						pF
Typical Thermal Resistance (Note 3)	$R_\theta(ja)$	75						$^\circ\text{C/W}$
Storage and Operation Junction Temperature	T_{STG}, T_J	-65 to +150						$^\circ\text{C}$

Note:

1. Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.
2. Measured at 1.0 MHz and applied voltage of $4.0V_{dc}$
3. Thermal resistance from junction to terminal mounted on $5 \times 5\text{mm}$ copper pad area