

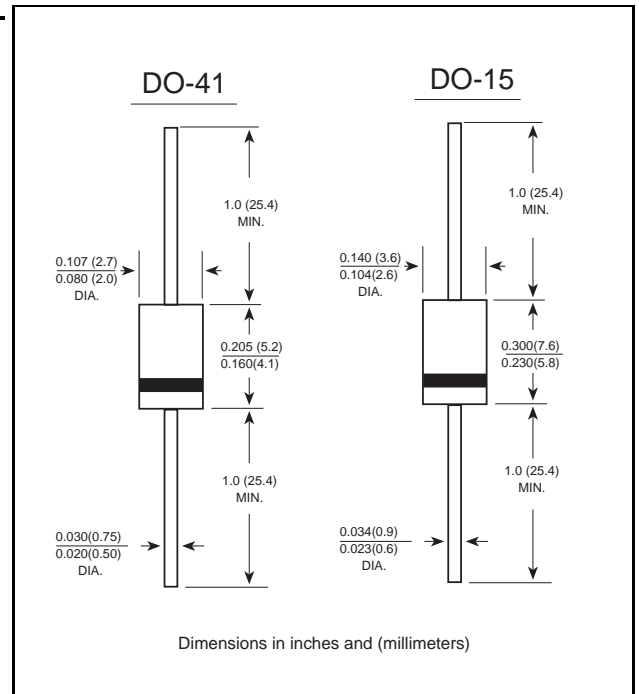
R1200F~R5000F 0.5/0.2Amp Fast Recovery High Voltage Rectifier

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

Case: JEDEC DO-41 /DO-15 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, 0.33 grams(DO-41)
 0.014 ounce, 0.40 grams(DO-15)



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 current derate by 20%.

	SYMBOLS	R1200F	R1500F	R1800F	R2000F	R2500F	R3000F	R3500F	R4000F	R5000F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	1200	1500	1800	2000	2500	3000	3500	4000	5000	VOLTS
Maximum RMS voltage	V_{RMS}	840	1050	1260	1400	1750	2100	2450	2800	3500	VOLTS
Maximum DC blocking voltage	V_{DC}	1200	1500	1800	2000	2500	3000	3500	4000	5000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 55^\circ\text{C}$	$I_{(AV)}$	0.5			0.2					Amps	
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	2.5		4.0		5.0		6.5		Volts	
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
Maximum reverse recovery time (NOTE 1)	t_{rr}	500									ns
Typical junction capacitance (NOTE 2)	C_J	15.0									pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	50.0									$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-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 1MHz and applied reverse voltage of 4.0V D.C.
 3.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted