

ESJA57-03A

HIGH VOLTAGE FAST RECOVERY RECTIFIER

Reverse Voltage - 3000 V

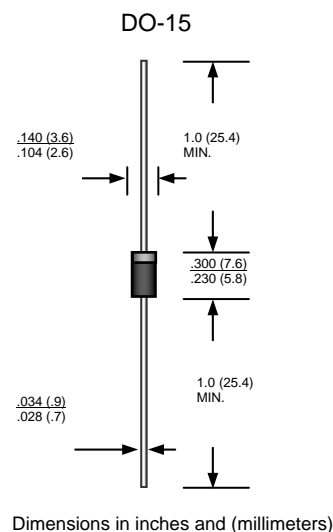
Forward Current - 0.5 A

Features

- High current capability
- low forward voltage drop
- High reliability
- High forward surge current capability

Mechanical Data

- Case: DO-15 molded plastic body
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Plated axial leads, solderable per MIL-STD-202E, Method 208C
- Polarity: Color band denotes cathode end
- Mounting position: Any



Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half-wave, 50 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

Parameter	Symbols	ESJA57-03A	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	3000	V
Maximum RMS Voltage	V_{RMS}	2100	V
Maximum DC Blocking Voltage	V_{DC}	3000	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at $T_a = 75^\circ\text{C}$	$I_{(AV)}$	0.5	A
Peak Forward Surge Current, 10 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	20	A
Maximum Instantaneous Forward Voltage at 300 mA	V_F	6.5	V
Maximum Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	I_R	0.5 50	μA
Maximum Reverse Recovery Time ¹⁾	t_{rr}	500	ns
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 155	$^\circ\text{C}$

¹⁾ Reverse recovery condition: $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.

