

ER300~ER308

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 800 Volts CURRENT 3.0 Ampere

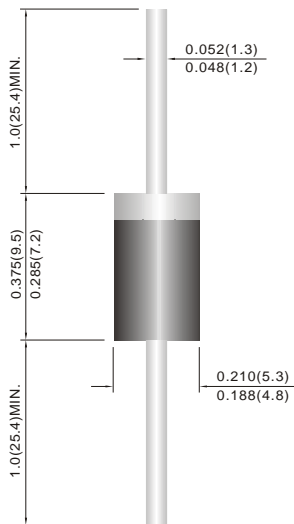


DO-201AD

Unit: inch(mm)

FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- In compliance with EU RoHS 2002/95/EC directives



MECHANICAL DATA

Case: Molded plastic, DO-201AD
 Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
 Polarity: Color Band denotes cathode end
 Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	ER300	ER301	ER301A	ER302	ER303	ER304	ER306	ER307	ER308	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	700	800	V	
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	490	560	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	700	800	V	
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	$I_{F(AV)}$	3.0									A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	125									A	
Maximum Forward Voltage at 3.0A DC	V_F	0.95			1.25		1.70	2.0	2.5		V	
Maximum DC Reverse Current at TA=25°C Rated DC Blocking Voltage TA=100°C	I_R	5.0					300				uA	
Maximum Reverse Recovery Time(Note 1)	T_{RR}	35										ns
Typical Junction capacitance (Note 2)	C_J	35										pF
Typical Junction Resistance(Note 3)	$R_{\theta JA}$	20										°C / W
Operating and Storage Temperature Rang T_J, T_{STG}	T_J, T_{STG}	-55 TO +125									°C	

NOTES: 1. Reverse Recovery Test Conditions: $I_F=.5A, I_R=1A, I_{rr}=.25A$
 2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
 3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

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RATING AND CHARACTERISTIC CURVES

