

DATA SHEET

ER300~ER306

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 600 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.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

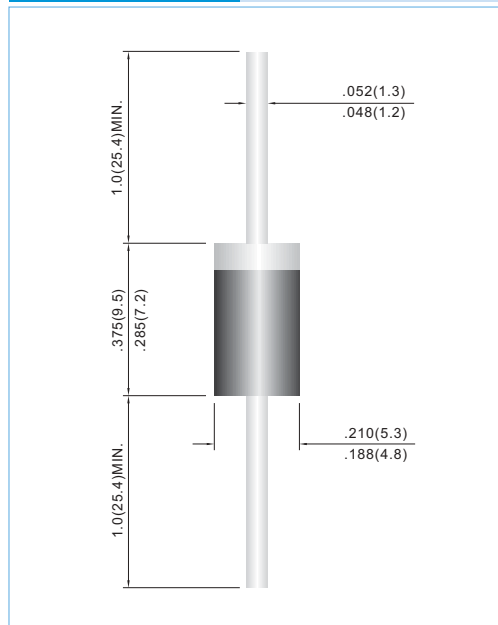
Case: Molded plastic, DO-201AD

Terminals: Axial leads, solderable to MIL-STD-202, Method 208

Polarity: Color Band denotes cathode end

Mounting Position: Any

Weight: 0.04 ounce, 1.12 gram



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	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_A=55^{\circ}C$	I_{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		V
Maximum DC Reverse Current at $T_A=25^{\circ}C$ Rated DC Blocking Voltage $T_A=125^{\circ}C$	I_R	5.0 300							μA
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							$^{\circ}C / W$
Operating and Storage Temperature Range T_J, T_{STG}	T_J, T_{STG}	-55 TO +150							$^{\circ}C$

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

RATING AND CHARACTERISTIC CURVES

