

ER800~ER806

SUPERFAST RECOVERY RECTIFIERS

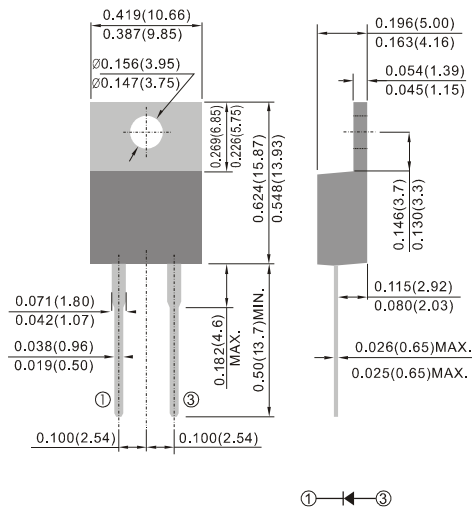
VOLTAGE 50 to 600 Volts CURRENT 8 Amperes



TO-220AC

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.
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: Molded plastic, TO-220AC
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	ER800	ER801	ER801A	ER802	ER803	ER804	ER806	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 at $T_C=75^\circ C$	$I_{F(AV)}$	8							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 8A (Note 1)	V_F	0.95				1.3		1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ C$ $T_J=100^\circ C$	I_R	5				300			μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35				ns			
Typical Junction Capacitance (Note 2)	C_J	65				pF			
Typical thermal Resistance (Note 3)	$R_{\theta JC}$	3				$^\circ C / W$			
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$

NOTES:

1. Pulse Test with PW=300 usec, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions: $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
3. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

