

ER201~ER207

SUPERFAST RECOVERY RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 2.0 Ampere

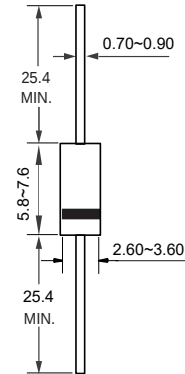
DO-15 Unit:mm

FEATURES

- Low Leakage Current
- High current capability
- High reliability
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	ER201	ER202	ER203	ER204	ER205	ER206	ER207	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 (see FIG.1)	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50							A
Maximum Forward Voltage at 2.0 A	V_F	0.95				1.30	1.70		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$	I_R	5.0 100							μA
Maximum Reverse Recovery Time(Note 1)	t_{rr}	35							ns
Thermal Resistance	$R_{\theta JA}$	65							$^\circ\text{C} / \text{W}$
Typical Junction Capacitance (Note2)	C_J	40				20			pF
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

NOTES:

1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
2. Measured at 1.0MHz and applied reverse voltage of 4.0 volt

ER201~ER207

RATING AND CHARACTERISTIC CURVES

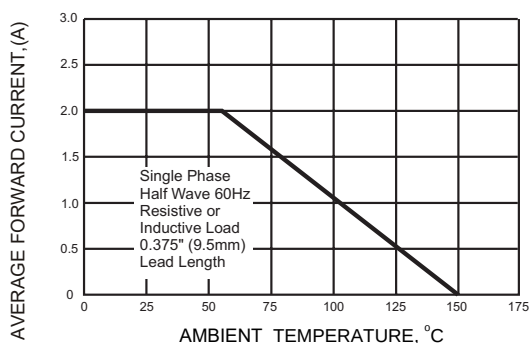


Fig. 1 Forward Current Derating Curve

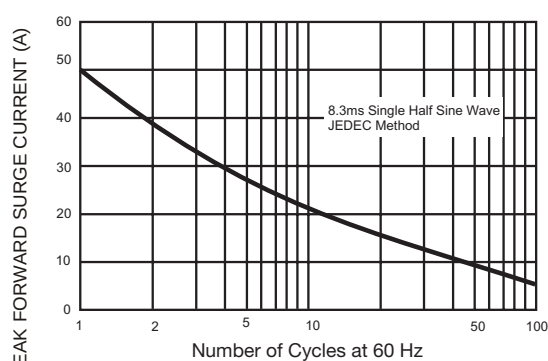


Fig. 2 Surge Current Derating Curve

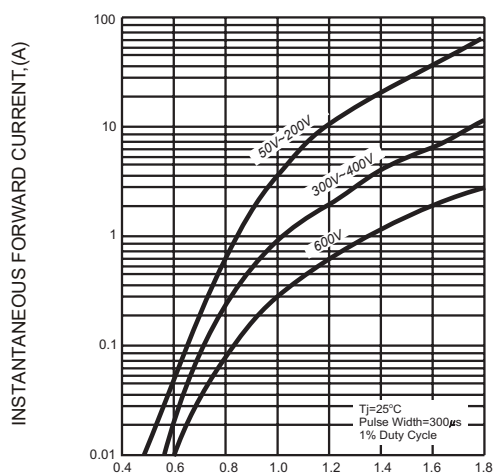


Fig. 3 Typical Forward Characteristics

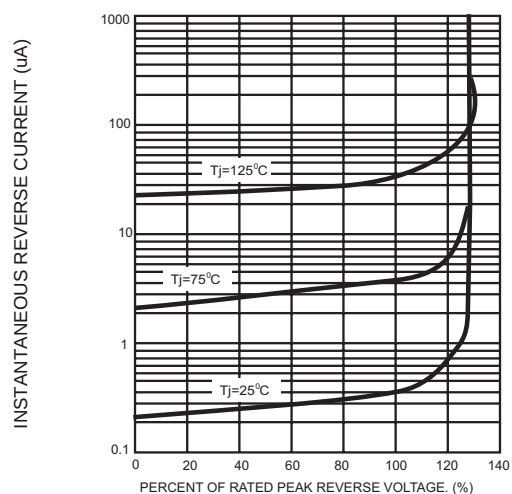


Fig. 4 Typical Reverse Characteristics

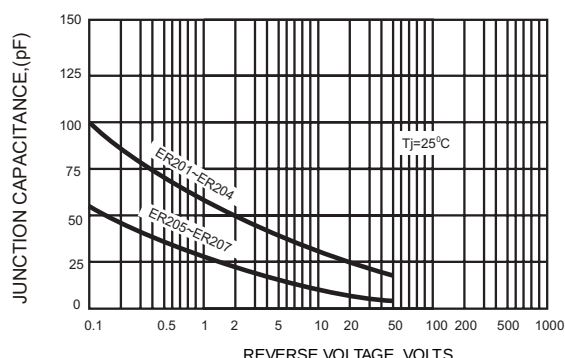
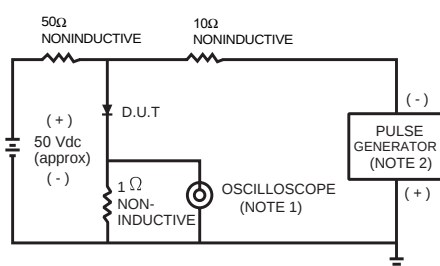


Fig. 5 Typical Junction Capacitance



NOTES:
3. Rise time = 7.0 ns max; Input impedance = 1.0 megaohm 22 pf.
4. Rise time = 10 ns max; Source impedance = 50 ohms.

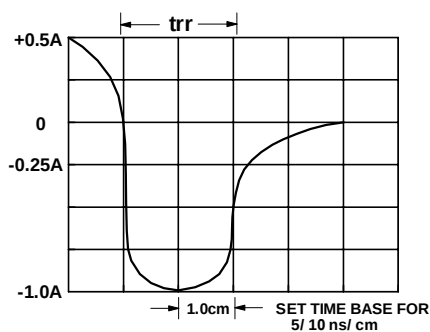


Fig. 6 Reverse Recovery Time Characteristic and Test Circuit

ER201~ER207

ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
ER201~ER207	DO-15	13 Inch	4000