TOP ONE SEMI CONDUCTOR

SUPERFAST RECOVERY RECTIFIERS

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
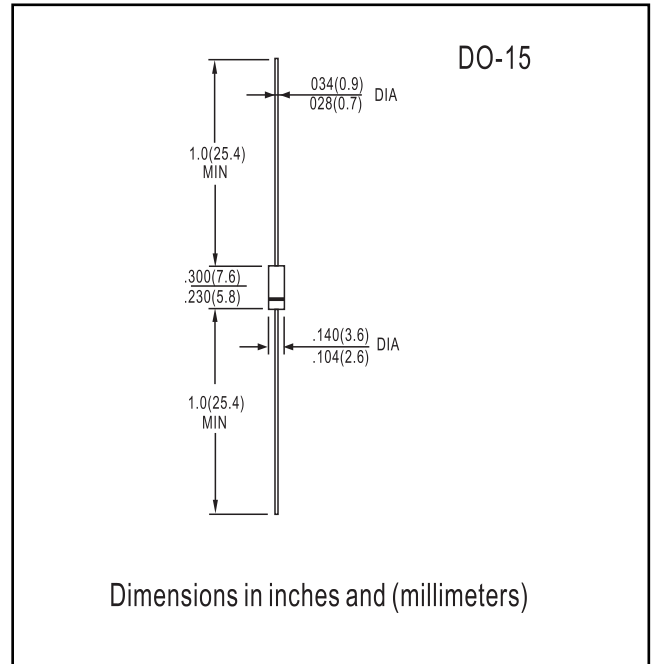- Plastic package has Underwriters Laboratories

MECHANICAL DATA

Case: Molded plastic, DO-15

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

Polarity: Color Band denotes cathode end

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram

DO-15

.034(0.9)/.028(0.7) DIA

1.0(25.4) MIN

.300(7.6)/.230(5.8)

.140(3.6)/.104(2.6) DIA

1.0(25.4) MIN

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

	ER200	ER201	ER201A	ER202	ER203	ER204	ER206	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	150	200	300	400	600	V
Maximum RMS Voltage	35	70	105	140	210	320	420	V
Maximum DC Blocking Voltage	50	100	150	200	300	400	600	V
Maximum Average Forward Current .375"(9.5mm) lead length at T_A=55	2.0							A
Peak Forward Surge Current, I_{FM} (surge): 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	50.0							A
Maximum Forward Voltage at 2.0A DC	.95				1.25		1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							A
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=125	200							A
Maximum Reverse Recovery Time(Note 1)	35.0							ns
Typical Junction capacitance (Note 2)	22							pF
Typical Junction Resistance(Note 3) R JA	40							°C/W
Operating and Storage Temperature Range T_J	-55 to +150							°C

NOTES:

1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.25A

TOP ONE
SEMI CONDUCTOR

SUPERFAST RECOVERY RECTIFIERS

ER200 THRU ER206

50V-600V   2.0A

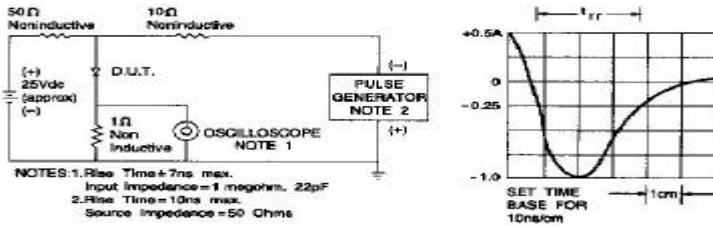**RATINGS AND CHARACTERISTICS CURVES   ER200   THRU   ER206**

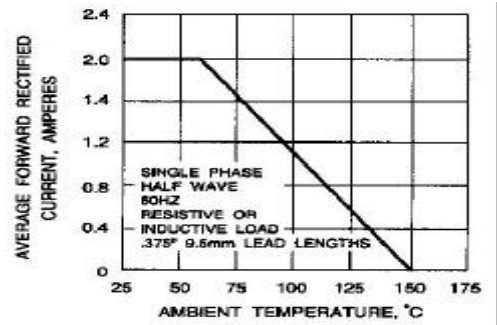Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC
AND TEST CIRCUIT DIAGRAM

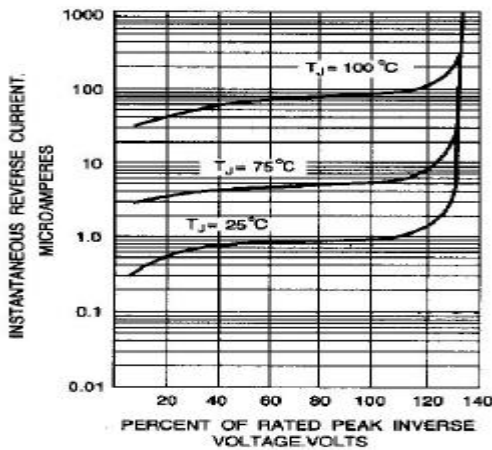Fig. 2-MAXIMUM AVERAGE FORWARD
CURRENT RATING
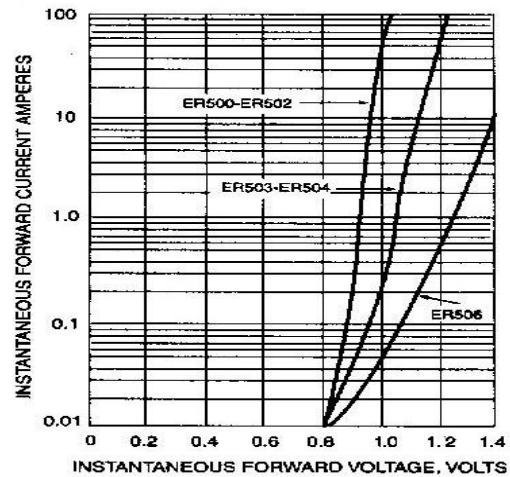
Fig. 3- TYPICAL REVERSE CHARACTERISTICS
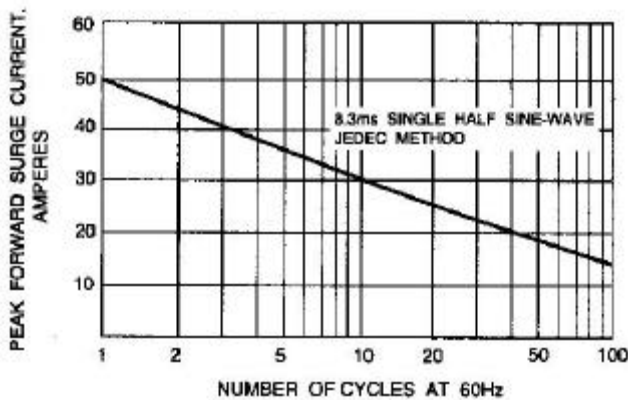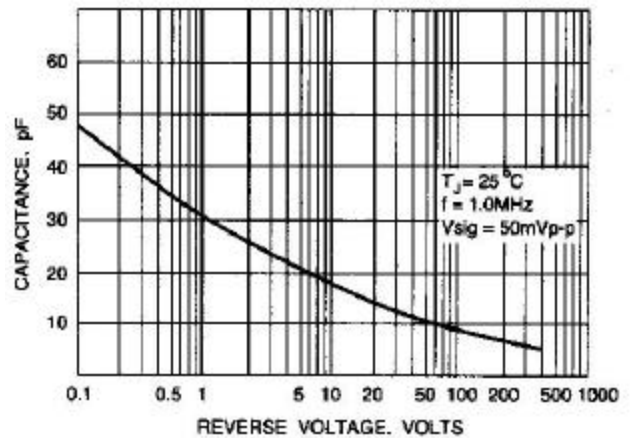
Fig. 4 -FORWARD CURRENT DERATING CURVE

Fig. 5-MAXIMUM NON-REPETITIVE SURGE CURRENT

Fig. 6-TYPICAL JUNCTION CAPACITANCE