



# ER200~ER206

## GLASS PASSIVATED SUPERFAST RECOVERY RECTIFIERS

**VOLTAGE** 50 to 600 Volt **CURRENT** 2 Ampere

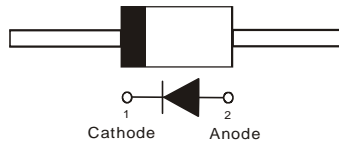
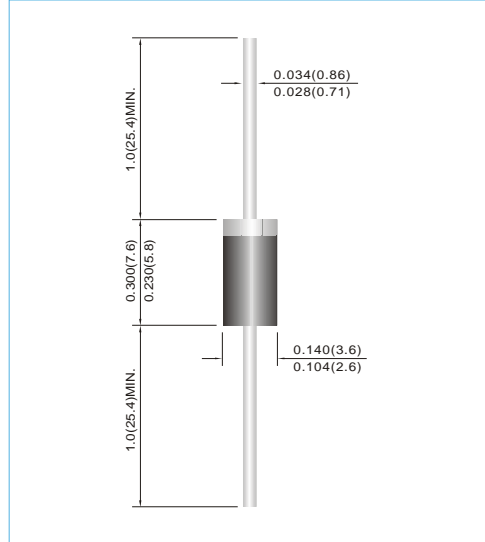
**DO-15** Unit : inch(mm)

### FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- 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 compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Weight: 0.014 ounces, 0.397 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	ER200	ER201	ER201A	ER202	ER203	ER204	ER206	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	$I_{F(AV)}$	2							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50							A
Maximum Forward Voltage at 2A	$V_F$	0.95				1.25		1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	$I_R$	1				200			$\mu A$
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	35				ns			
Typical Junction Capacitance (Note 2)	$C_J$	22				pF			
Typical Junction Resistance (Note 3)	$R_{\theta JA}$	40				$^{\circ}C / W$			
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^{\circ}C$

NOTES:1. Reverse Recovery Test Conditions :  $I_F=0.5A$ ,  $I_R=-1A$ ,  $I_{rr}=-0.25A$

2. Measured at 1 MHz and applied reverse voltage of 4 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

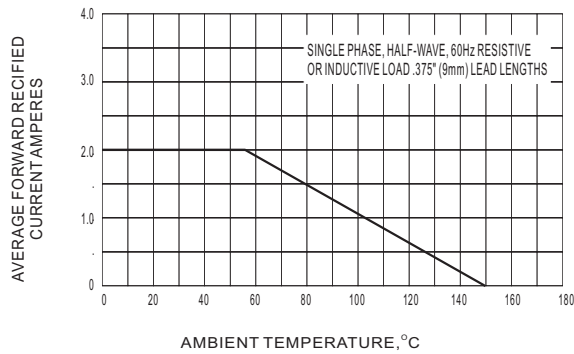


FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT RATING

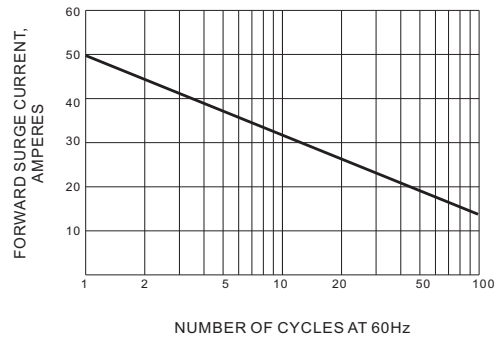


FIG. 2 MAXIMUM NON-REPETITIVE SURGE CURRENT

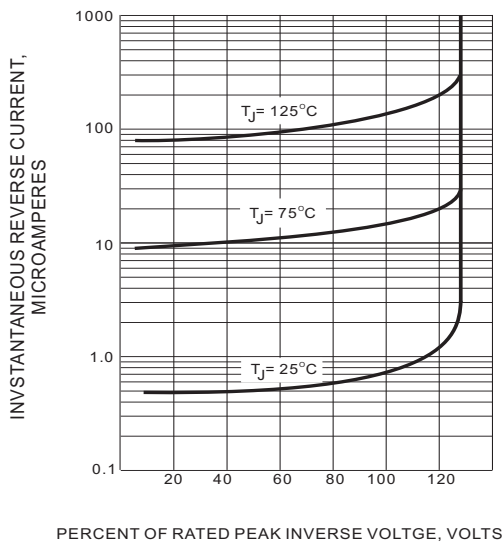


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

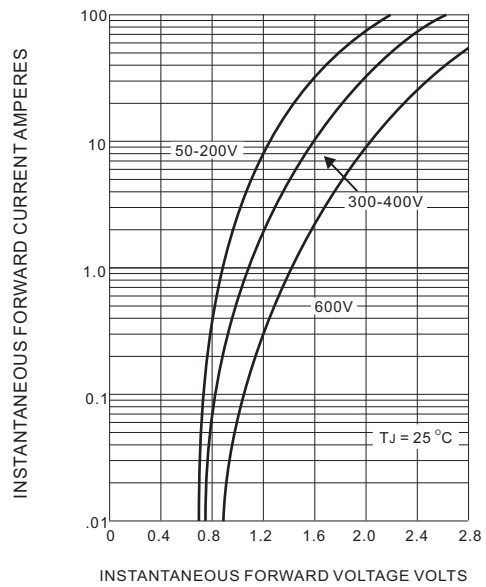


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

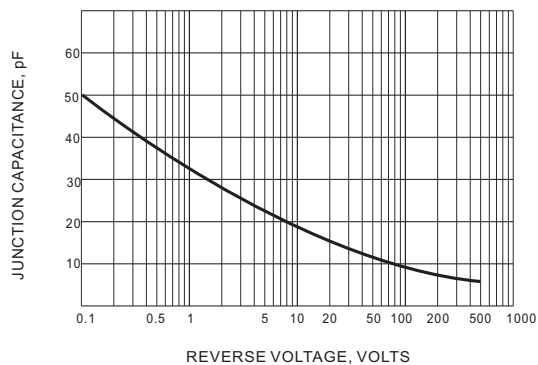


FIG. 5 TYPICAL JUNCTION CAPACITANCE



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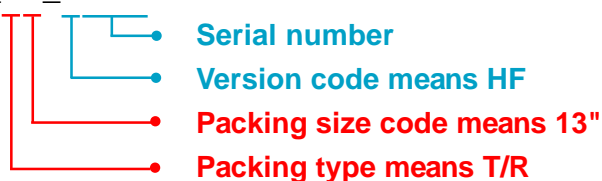
### Part No\_packing code\_Version

ER200\_AY\_00001  
ER200\_AY\_10001  
ER200\_B0\_00001  
ER200\_B0\_10001  
ER200\_R2\_00001  
ER200\_R2\_10001

For example :

**RB500V-40\_R2\_00001**

Part No.



Packing Code XX				Version Code XXXXX		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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