

## FEATURES

- | Low cost, Low leakage
- | Low forward voltage drop
- | High current capability



DO-15

## MECHANICAL DATA

- | Case: Molded plastic, DO-15
- | Polarity: Color band denotes cathode end
- | Mounting position: Any

## APPROVALS

<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003

## MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter	Symbol	R2000HE	Unit
Marking		R2000HE	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	2000	V
Maximum RMS Voltage	V <sub>RMS</sub>	1400	
Maximum DC Blocking Voltage	V <sub>DC</sub>	2000	
Maximum Average Forward Rectified Current at T <sub>A</sub> = 50°C	I <sub>O</sub>	200	mA
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30	A
Typical Current Square Time	I <sup>2</sup> t	3.7	A <sup>2</sup> Sec
Maximum Instantaneous Forward Voltage at 0.2A DC	V <sub>F</sub>	4.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C	5.0	μA
	T <sub>A</sub> =100°C	50	
Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at T <sub>L</sub> =75°C		30	
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	30	pF
Typical Thermal Resistance	R <sub>θJA</sub>	65	°C/W
	R <sub>θJL</sub>	30	

# MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter	Symbol	R2000HE	Unit
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	75	nSec
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55~+150	°C

Note:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts
2. Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=-1.0A, I<sub>RR</sub>=-0.25A

## CHARACTERISTIC CURVES

Fig.1 Typical Forward Current Derating Curve

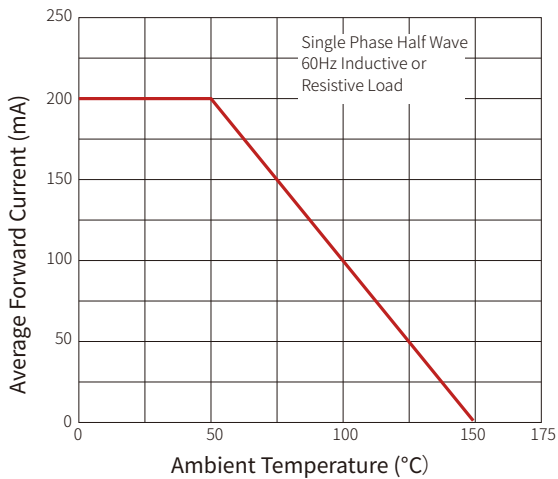


Fig.2 Maximum Non-repetitive Peak Forward Surge Current

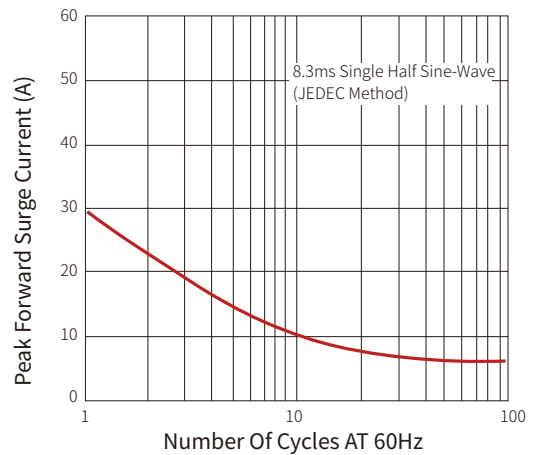
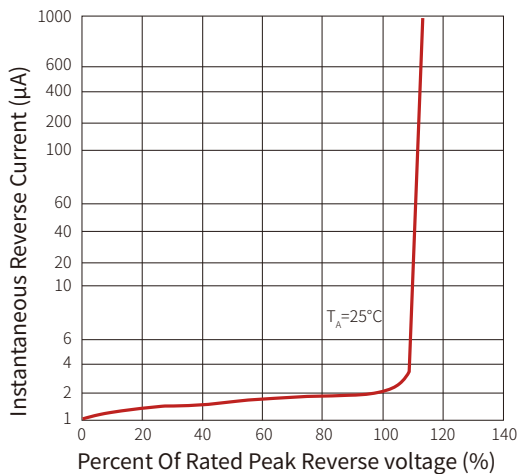
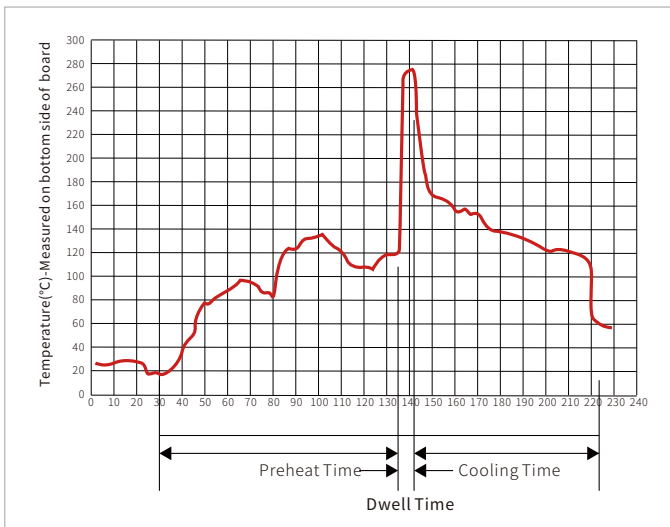


Fig.3 Typical Reverse Characteristics

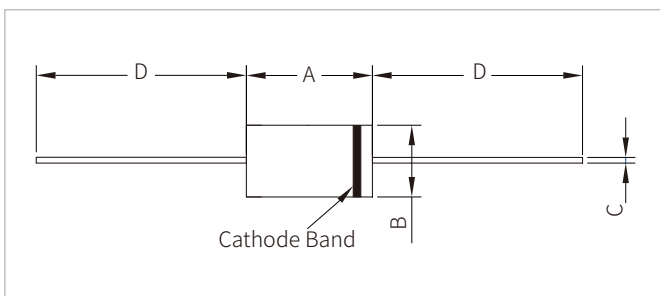


## WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

## DO-15 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.80	7.60	0.230	0.300
B	2.60	3.60	0.104	0.140
C	0.70	0.90	0.026	0.034
D	25.40	-	1.000	-

## ORDERING INFORMATION

Part Number	Component Package	Per Carton	Description
R2000HE	DO-15	4000pcs	Box

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