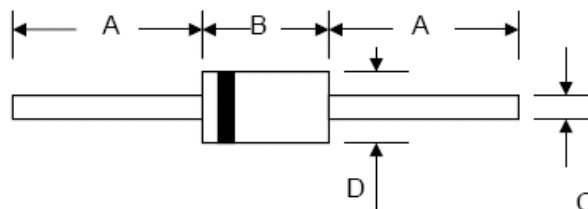




**Technical Data**  
Data Sheet N0455, Rev. -

**Features**

- Fast switching
- Low Forward
- High Current Capability
- High Surge Capability
- High reliability
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



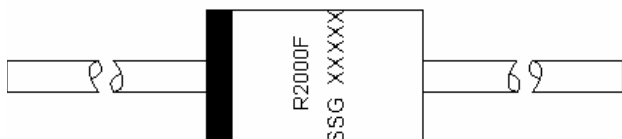
**Mechanical Data**

- Case: Molded Plastic
- Epoxy: Device has flammability classification 94-O
- Lead: MIL-STD-202E method 208C guaranteed
- Mounting Position: Any
- Weight: 0.35 gram

DO-41				
Dim	Min	Max	Min	Max
A	25.4	—	1.000	—
B	4.06	5.21	0.159	0.205
C	0.71	0.864	0.028	0.034
D	2.00	2.72	0.079	0.107
	In mm		In inch	

**Marking Diagram:**

Where XXXXX is YYWWL



- R2000F = Part Name
- SSG = SSG
- YY = Year
- WW = Week
- L = Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**Ordering Information**

Device	Package	Shipping
R2000F	DO-41 (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	R2000F	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	2000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	1400	V
Average Rectified Output Current @T <sub>A</sub> = 50°C	I <sub>O</sub>	0.2	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30	A
Forward Voltage @I <sub>F</sub> = 0.2A	V <sub>FM</sub>	4.0	V
Peak Reverse Current At Rated DC Blocking Voltage @T <sub>A</sub> = 25°C @T <sub>A</sub> = 55°C	I <sub>RM</sub>	5.0 100	μA
Reverse Recovery Time (Note )	t <sub>rr</sub>	500	nS
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

Note: Test Conditions: I<sub>F</sub> = 0.5A, I<sub>R</sub> = -1.0A, I<sub>RR</sub> = -0.25A.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

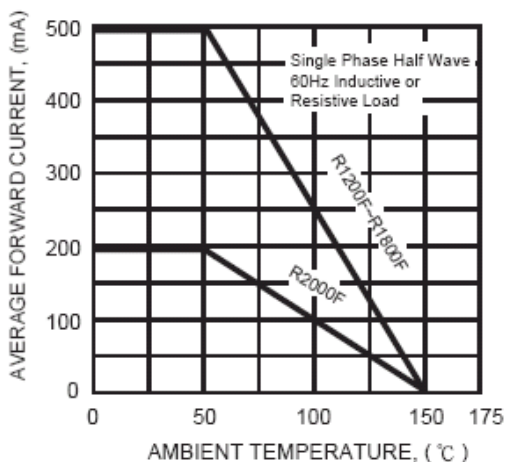


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

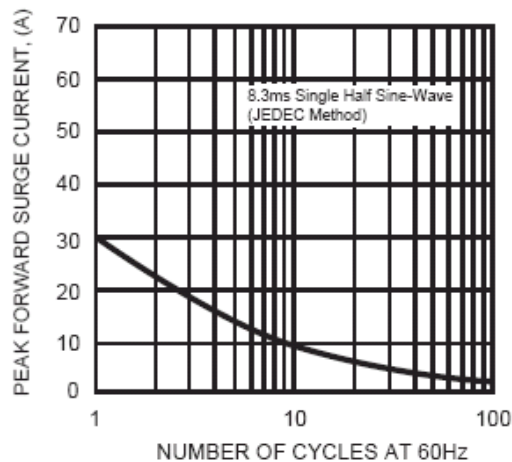
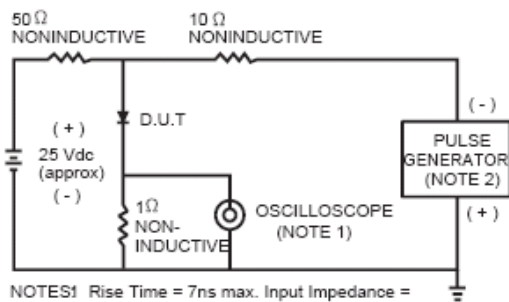
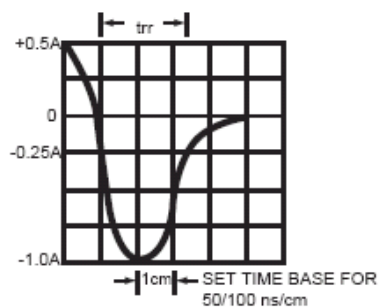


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22 pF.  
2. Rise Time = 10ns max. Source Impedance = 50 ohms.





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