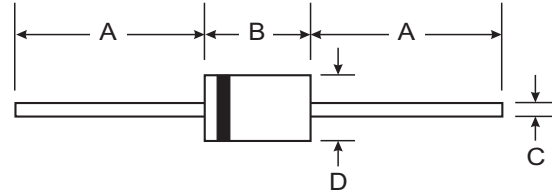


### Features

- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 70A Peak
- **Lead Free Finish, RoHS Compliant (Note 3)**

### Mechanical Data

- Case: DO-15
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish – Bright Tin. Solderable per MIL-STD-202, Method 208 (e3)
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.4 grams (approximate)



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.6
All Dimensions in mm		

### 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	2A01	2A02	2A03	2A04	2A05	2A06	2A07	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T <sub>A</sub> = 55°C	I <sub>O</sub>	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	70							A
Forward Voltage @ I <sub>F</sub> = 2.0A	V <sub>FM</sub>	1.1							V
Peak Reverse Leakage Current at Rated DC Blocking Voltage @ T <sub>A</sub> = 25°C @ T <sub>A</sub> = 100°C	I <sub>RM</sub>	5.0 50							μA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	17.5							A <sup>2</sup> s
Typical Total Capacitance (Note 2)	C <sub>T</sub>	15							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R <sub>θJA</sub>	60							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150							°C

- Notes: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.  
2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.  
3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see *EU Directive Annex Notes 5 and 7*.

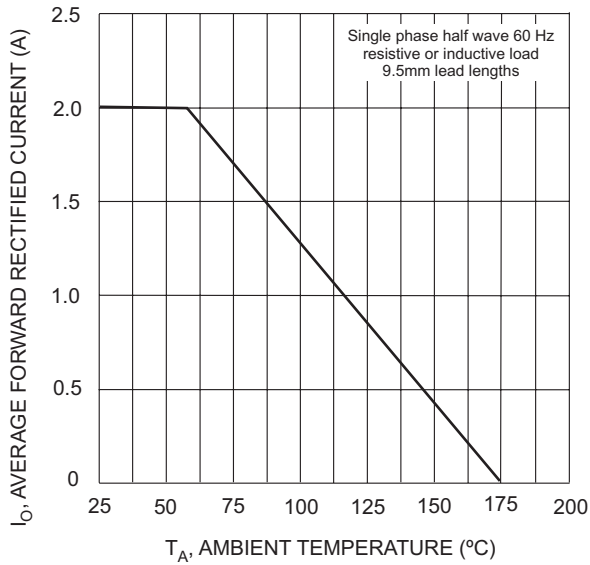


Fig. 1 Forward Current Derating Curve

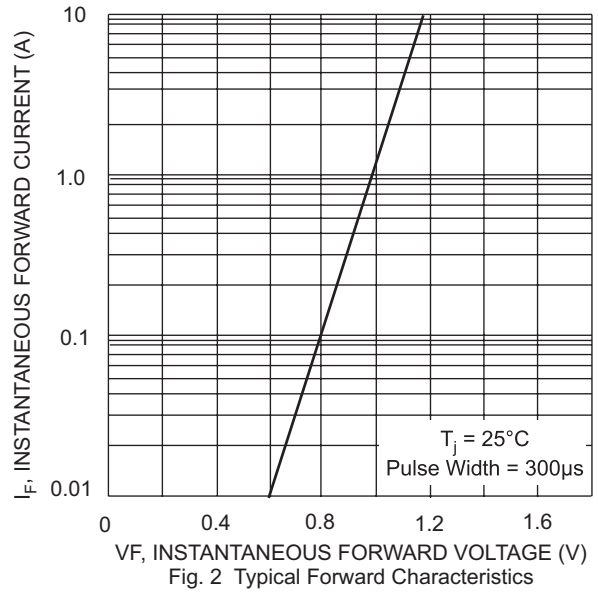


Fig. 2 Typical Forward Characteristics

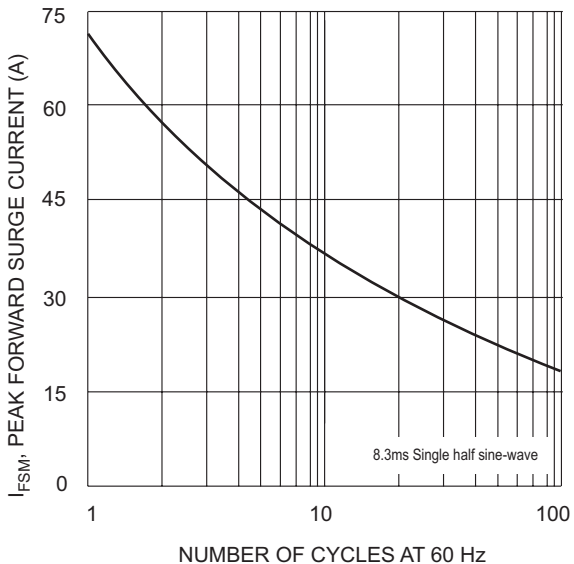


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

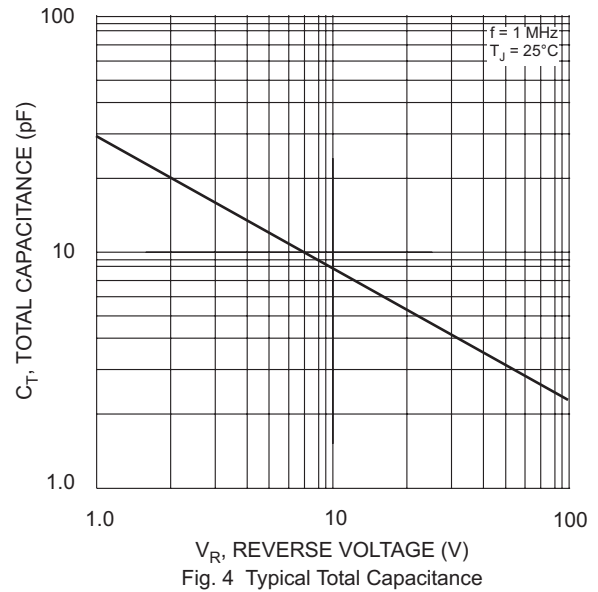


Fig. 4 Typical Total Capacitance

**Ordering Information** (Note 4)

Device	Packaging	Shipping
2A01-T	DO-15	4K/Tape & Reel, 13-inch
2A02-T	DO-15	4K/Tape & Reel, 13-inch
2A03-T	DO-15	4K/Tape & Reel, 13-inch
2A04-T	DO-15	4K/Tape & Reel, 13-inch
2A05-T	DO-15	4K/Tape & Reel, 13-inch
2A06-T	DO-15	4K/Tape & Reel, 13-inch
2A07-T	DO-15	4K/Tape & Reel, 13-inch

Notes: 4. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

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