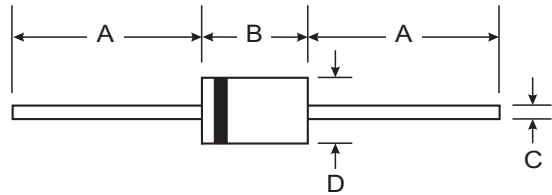


Features

- 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_A = 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_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _A = 55°C	I_O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	70							A
Forward Voltage @ I _F = 2.0A	V_{FM}	1.1							V
Peak Reverse Leakage Current at Rated DC Blocking Voltage @ T _A = 25°C @ T _A = 100°C	I_{RM}	5.0 50							μA
I ² t Rating for Fusing (t < 8.3ms)	I ² t	17.5							A ² s
Typical Total Capacitance (Note 2)	C _T	15							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R _{θJA}	60							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-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.

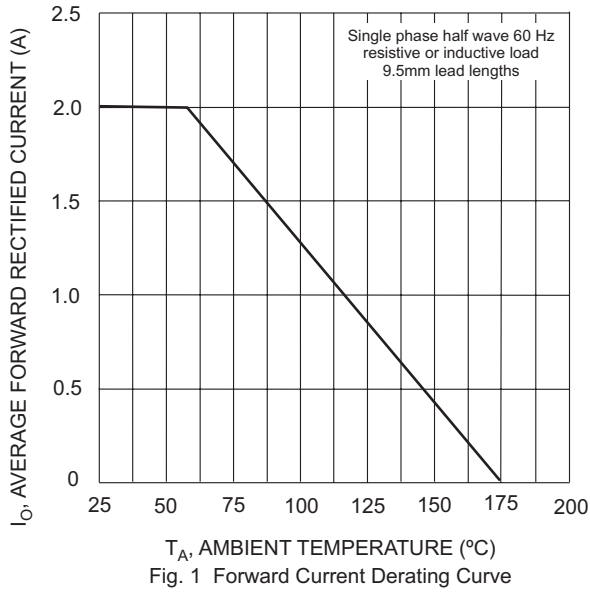


Fig. 1 Forward Current Derating Curve

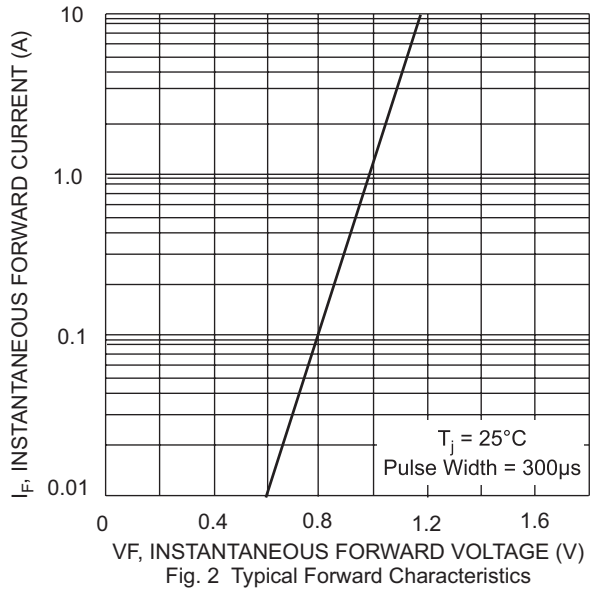


Fig. 2 Typical Forward Characteristics

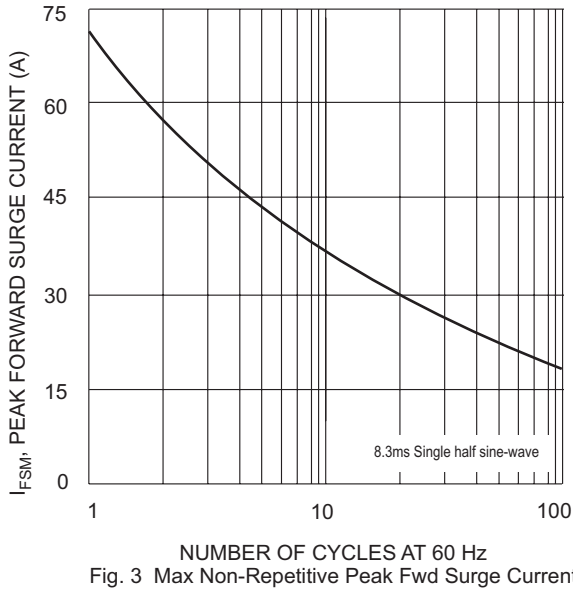


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

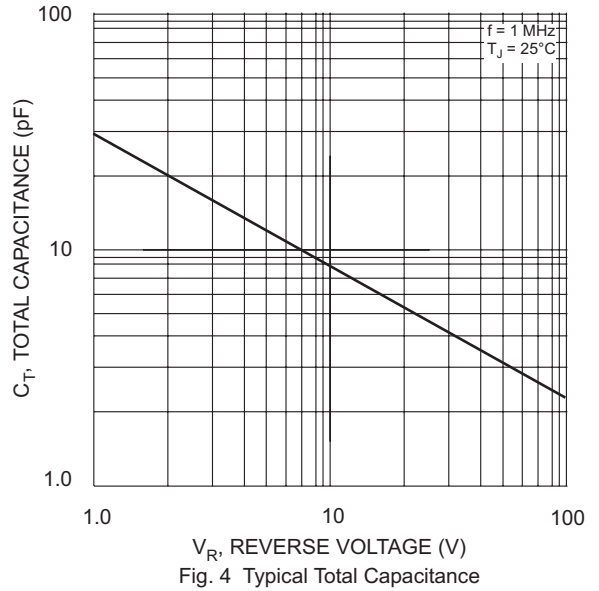


Fig. 4 Typical Total Capacitance

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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