

2A01 THRU 2A07

General Purpose Plastic Rectifiers

Reverse Voltage – 50 to 1000 V
Forward Current – 2.0 A

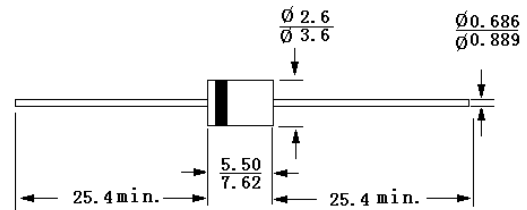
Features

- Diffused junction
- High current capability and low forward voltage drop
- Surge overload rating to 70A peak

Mechanical Data

- **Case:** Molded plastic
- **Terminates:** Plated leads solderable per MIL-STD-202, Method 208
- **Polarity:** Cathode band
- **Mounting position:** Any
- **Marking:** Type number

D0-15



Dimensions in mm

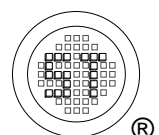
Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbols	2A01	2A02	2A03	2A04	2A05	2A06	2A07	Units
Maximum peak repetitive reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum working peak reverse voltage	V_{RWM}	50	100	200	400	600	800	1000	V
Maximum DC blocking voltage	V_R	50	100	200	400	600	800	1000	V
Maximum RMS reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Maximum average rectified output current ⁽¹⁾ @ $T_A=55^{\circ}C$	I_O	2							A
Non-repetitive peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	70							A
Maximum forward voltage @ $I_F=2A$	V_{FM}	1.1							V
Maximum peak reverse current @ $T_A=25^{\circ}C$	I_{RM}	5							μA
at rated DC blocking voltage @ $T_A=100^{\circ}C$		50							μA
I^2t rating for fusing ($t<8.3ms$)	I^2t	17.5							A^2s
Typical junction capacitance ⁽²⁾	C_J	15							pF
Typical thermal resistance junction to ambient ⁽¹⁾	$R_{\theta JA}$	60							K/W
Operating and Storage temperature range	T_J, T_{Stg}	-65 to +150							$^{\circ}C$

Notes: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

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



Dated : 20/06/2003

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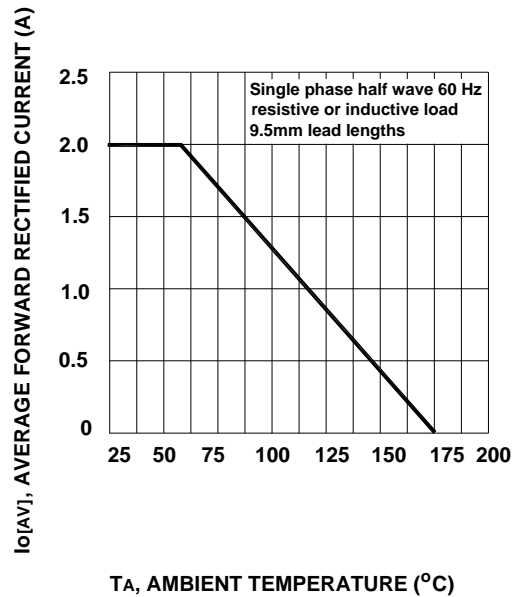


Fig.1 Forward Current Derating Curve

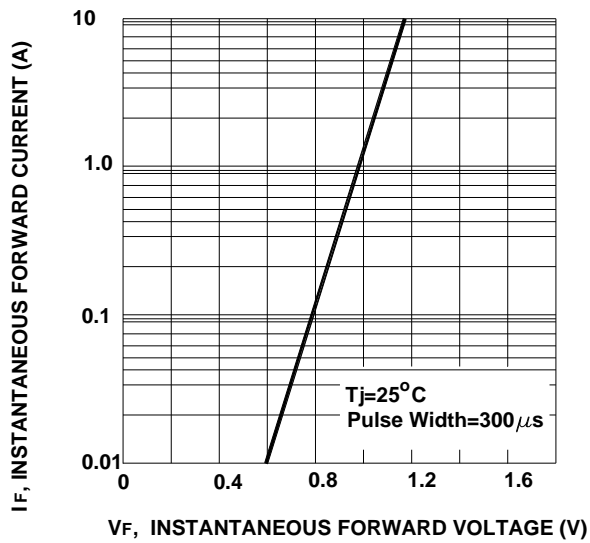


Fig.2 Typical Forward Characteristics

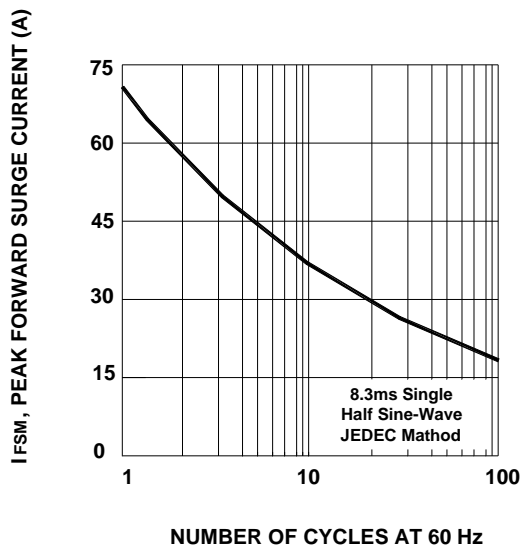


Fig.3 Max Non-Repetitive Peak Forward Surge Current

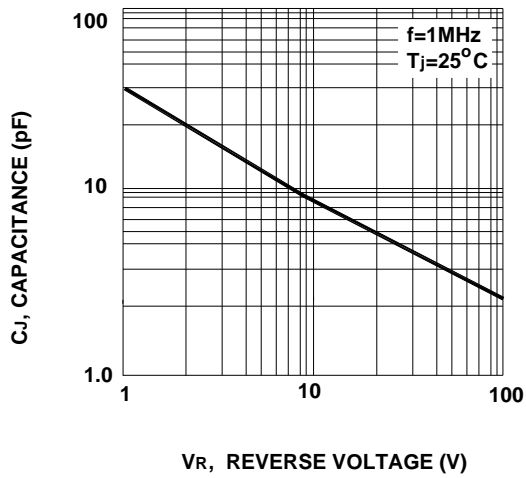


Fig.4 Typical Junction Capacitance

