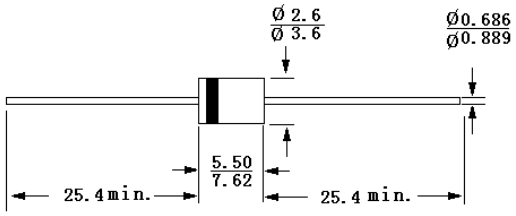
2A01 THRU 2A07

GENERAL PURPOSE PLASTIC RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 2.0 Amperes

Features

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

DO-15



Dimensions in mm

Mechanical Data

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

Absolute Maximum Ratings and Characteristics

Ratings at 25^{0}C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, 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	Volts
Maximum working peak reverse voltage	V_{RWM}	50	100	200	400	600	800	1000	Volts
Maximum DC blocking voltage	V_R	50	100	200	400	600	800	1000	Volts
Maximum RMS reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Maximum average rectified output current[1] @T_A=55 ^{O}C	I_O	2							Amps
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	70							Amps
Maximum forward voltage @ I_F= 2A	V_{FM}	1.1							Volts
Maximum peak reverse current @T_A = 25 ^{O}C at rated DC blocking voltage @T_A = 100^{O}C	I_{RM}	5 50							µA 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_S	-65 to+150							^{O}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

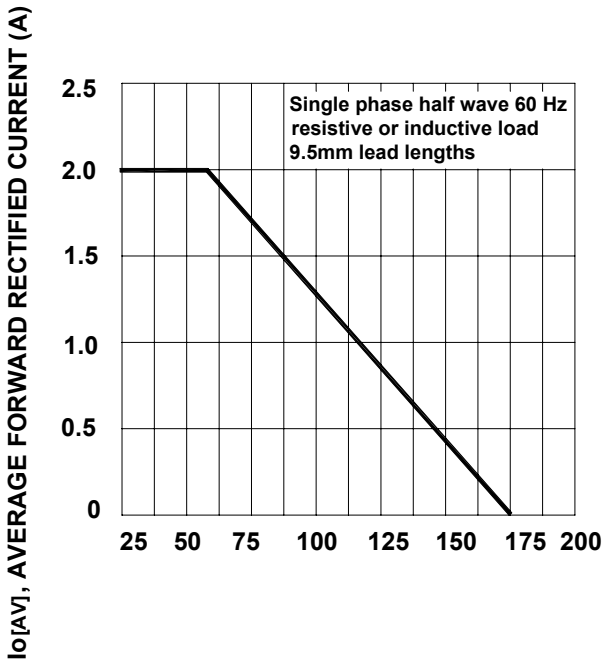


Fig.1 Forward Current Derating Curve

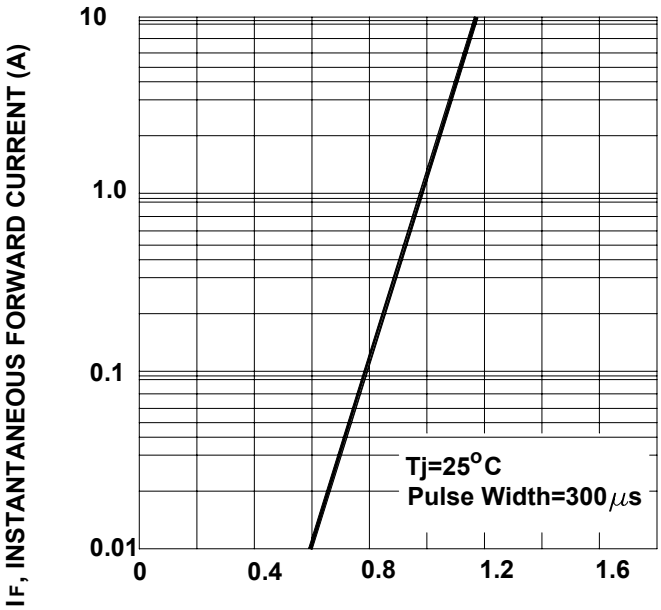


Fig.2 Typical Forward Characteristics

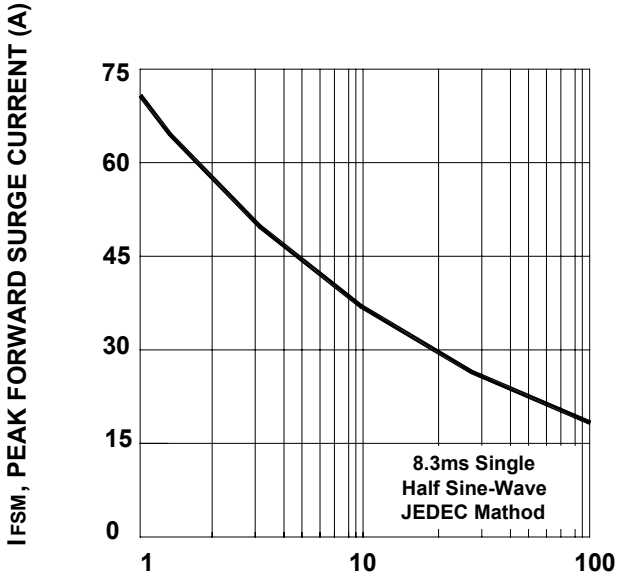


Fig.3 Max Non-Repetitive Peak Forward Surge Current

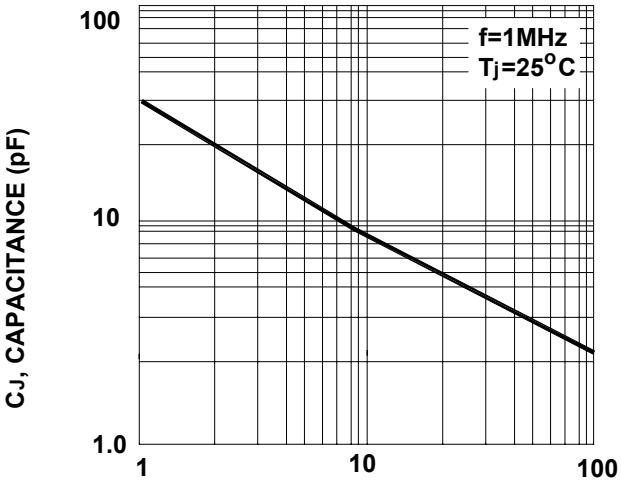


Fig.4 Typical Junction Capacitance