

Pb Free Plating Product

## 2A01 thru 2A07



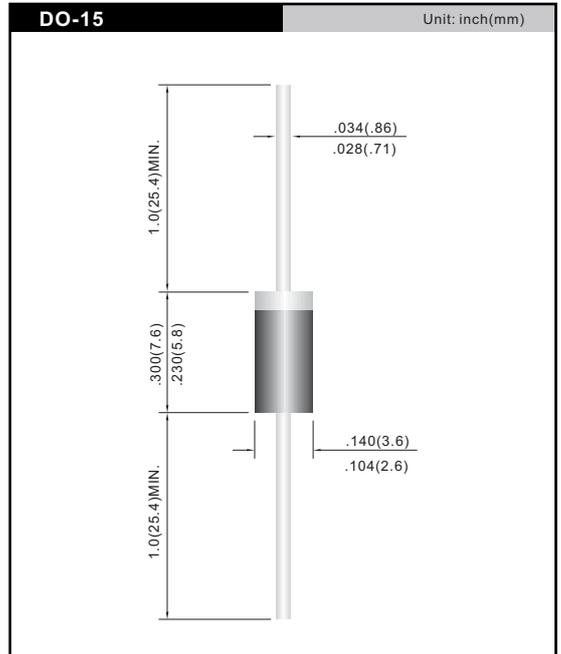
## 2.0 Ampere DO-15 Package General Purpose Rectifiers

**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

**Absolute Maximum Ratings and Characteristics**

Ratings at 25°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 <sup>(1)</sup> @ $T_A=55^\circ\text{C}$	$I_O$	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 @ $I_F=2\text{A}$	$V_{FM}$	1.1							Volts
Maximum peak reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_{RM}$	5 50							$\mu\text{A}$ $\mu\text{A}$
$I^2t$ rating for fusing ( $t<8.3\text{ms}$ )	$I^2t$	17.5							$\text{A}^2\text{s}$
Typical junction capacitance <sup>(2)</sup>	$C_J$	15							pF
Typical thermal resistance junction to ambient <sup>(1)</sup>	$R_{\theta JA}$	60							K/W
Operating and Storage temperature range	$T_J, T_S$	-65 to +150							$^\circ\text{C}$

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

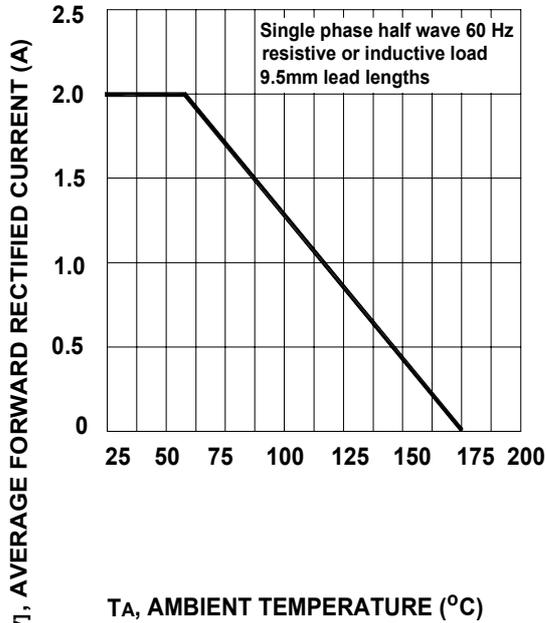


Fig.1 Forward Current Derating Curve

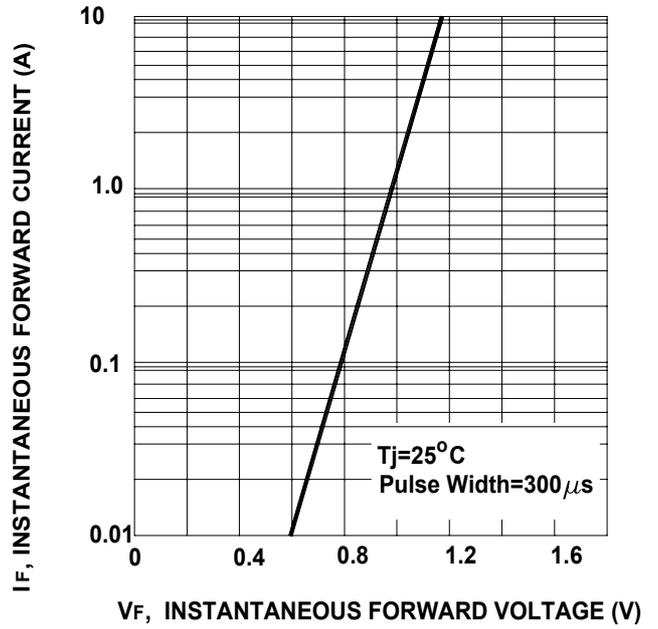


Fig.2 Typical Forward Characteristics

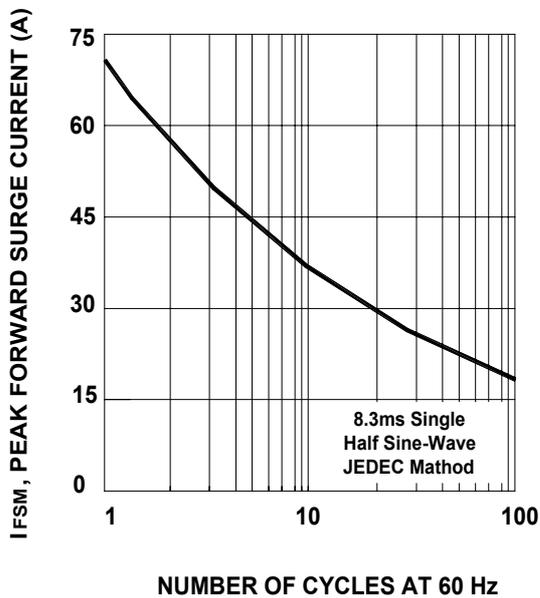


Fig.3 Max Non-Repetitive Peak Forward Surge Current

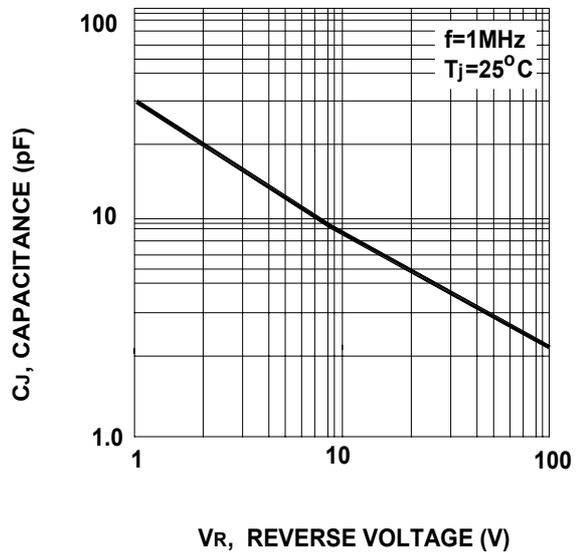


Fig.4 Typical Junction Capacitance