

BLOCK TYPE AUTOMOTIVE RECTIFIER

B302 THRU B304

VOLTAGE RANGE 200 to 400 Volts

CURRENT 30.0 Amperes

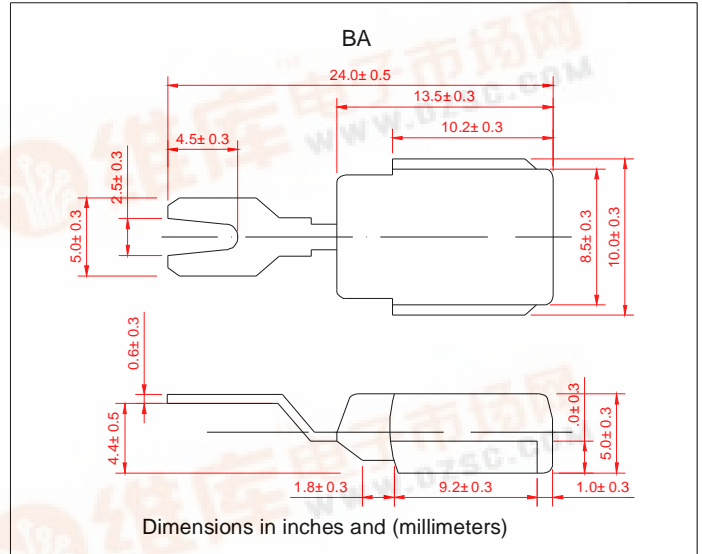
TECHNICAL SPECIFICATION:

FEATURES

- Low Leakage
- Low forward voltage drop
- High current capability
- High forward surge current capacity
- Glass passivated chip

MECHANICAL DATA

- Technology: vacuum soldered
- Copper cup with transfer molded plastic
- Polarity: B30-P lead-P
B30-N lead-N
- Lead: Plated Ni lead, solderable per MIL-STD-202E method 208C
- Mounting: Press Fit
- Weight: 0.094 ounces, 2.65 grams



MAXIMUM RATINGS AND ELECTRICAL 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	B302-P B302-N	B303-P B303-N	B304-P B304-N	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	300	400	Volts
Maximum RMS Voltage	V_{RMS}	140	210	280	Volts
Maximum DC Blocking Voltage	V_{DC}	200	300	400	Volts
Maximum Average Forward Rectified Current, At $T_c=105^\circ\text{C}$	I_O	30			Amps
Peak Forward Surge Current 3.3ms single half sine wave superimposed on Rated load (JEDEC method)	I_{FSM}	400			Amps
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	664			A^2S
Maximum instantaneous Forward Voltage at 100A	V_F	1.10			Volts
Maximum DC Reverse Current at Rated $T_A=25^\circ\text{C}$ DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	5.0			UA
		450			
Typical Thermal Resistance	$R_{\theta JC}$	1.0			$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)			$^\circ\text{C}$

Notes:

1. Enough heatsink must be considered in application.

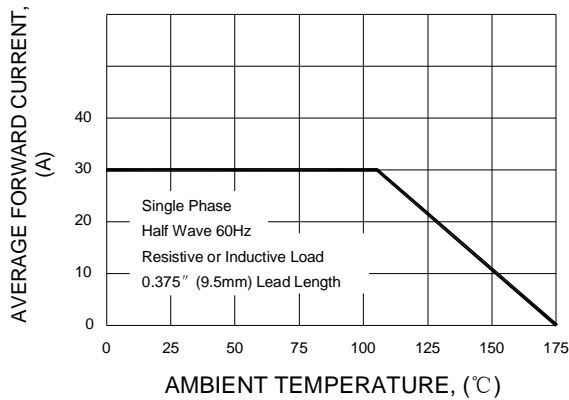
B302 THRU B304

VOLTAGE RANGE 200 to 400 Volts

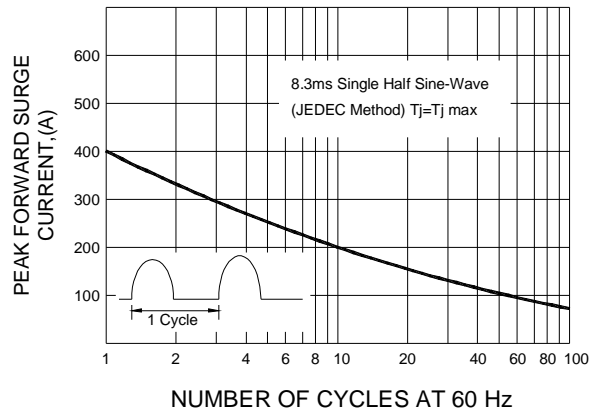
CURRENT 30.0 Amperes

RATINGS AND CHARACTERISTIC CURVES B302 THRU B304

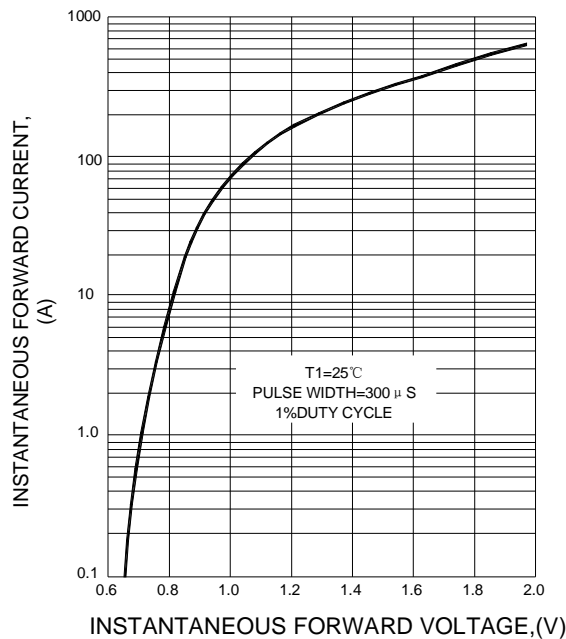
F1G.1 TYPICAL FORWARD CURRENT DERATING CURVE



F1G.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4 FORWARD POWER DISSIPATION

