

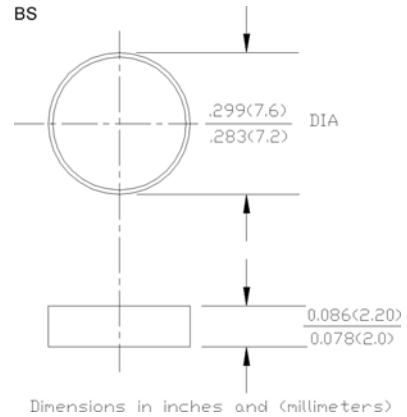
Technical Specification:

Features:

- ◆ Low leakage
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High forward surge current capability

Mechanical Data:

- ◆ Copper slug
- ◆ Technology: cell with vacuum soldered
- ◆ Polarity: blue dots denotes cathode end
- ◆ Mounting Position: Any
- ◆ Weight: 0.0512 ounce, 1.45 grams



Maximum Ratings and Electrical Characteristics

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

Parameters	Symbols	BSOZA401	BSOZA402	BSOZA403	BSOZA404	BSOZA406	Units	
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	300	400	600	Volts	
Maximum RMS voltage	V_{RMS}	70	140	210	280	420	Volts	
Maximum DC blocking voltage	V_{DC}	100	200	300	400	600	Volts	
Maximum Average rectified forward current at $T_C=110^\circ\text{C}$	I_D	40						Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	500						Amps
Maximum instantaneous forward voltage drop at 100A	V_F	1.08						Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	5.0 250						μA
Typical thermal resistance	$R_{\theta JC}$	1.0						$^\circ\text{C/W}$
Operating and storage temperature range	T_J, T_{STG}	-65 to +175						$^\circ\text{C}$

Notes: 1. Enough heatsink must be considered in application.

■ Ratings and Characteristic Curves

FIG.1—TYPICAL FORWARD CURRENT DERATING CURVE

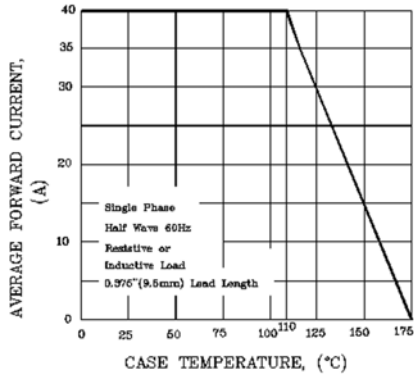


FIG.2—MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

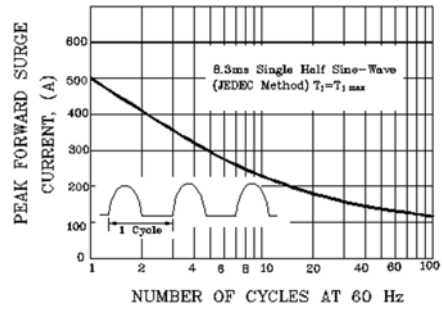


FIG.3—TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

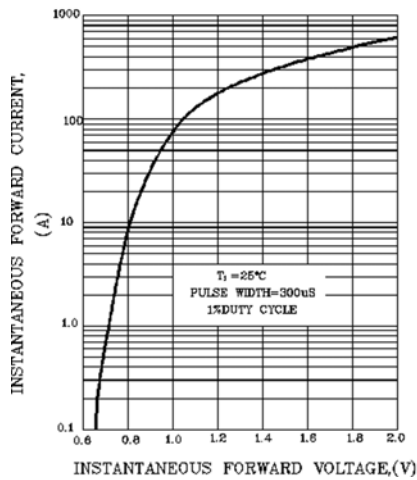


FIG.4. FORWARD POWER DISSIPATION

