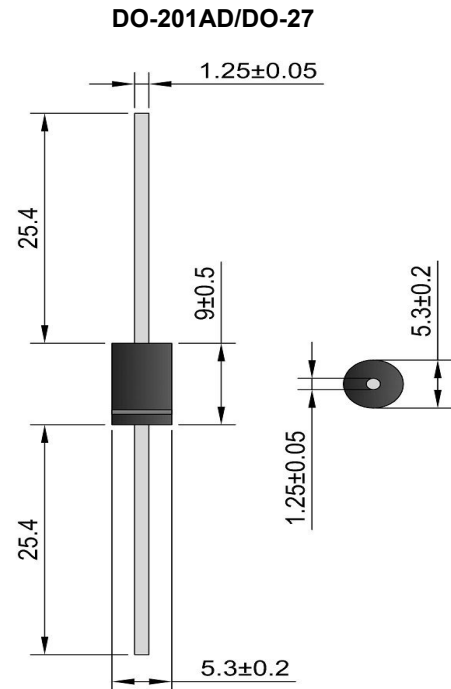


Features

- Schottky Barrier Chip
- Guard Ring for Transient and ESD Protection
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O
- Lead Free:For RoHS/Lead Free Verion

Mechanical Data

- Case: JEDEC DO-201AD/DO-27 Type, Molded Plastic
- Terminals:Pure tin Plated ,Lead Free Solderable Per MIL-STD-750, Method 2026
- Polarity: As marked
- Weight: 1.1 grams(approx)
- Mounting Position:Any



Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SB 820	SB 830	SB 840	SB 850	SB 860	SB 580	SB 8100	SB 8150	SB 8200	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	8									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150									A
Maximum Forward Voltage at 8A	V_F	0.55			0.75		0.85		0.95		V
Maximum DC Reverse Current at $T_J=25^{\circ}\text{C}$ Rated DC Blocking Voltag $T_J=100^{\circ}\text{C}$	I_R	0.5 20									mA
Typical Thermal Resistance Junction To Lead	$R_{\theta JL}$	10									$^{\circ}\text{C}/\text{W}$
Typical Thermal Resistance Junction To Ambient	$R_{\theta JL}$	25									$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-55 to +125				-55 to +150					$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150									$^{\circ}\text{C}$

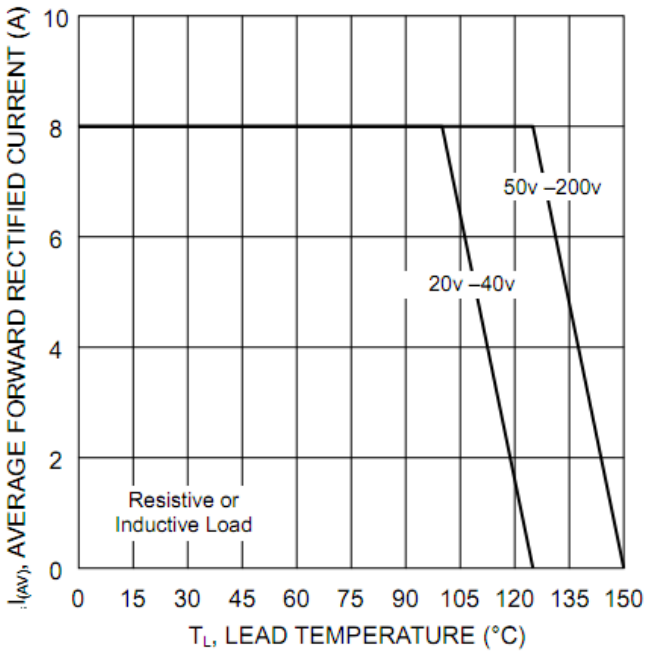


Fig. 1 Forward Current Derating Curve

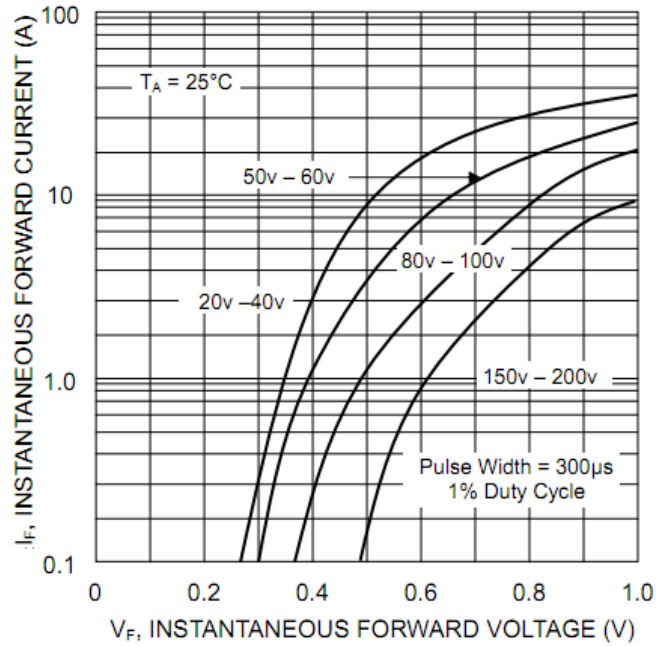


Fig. 2 Typical Forward Characteristics

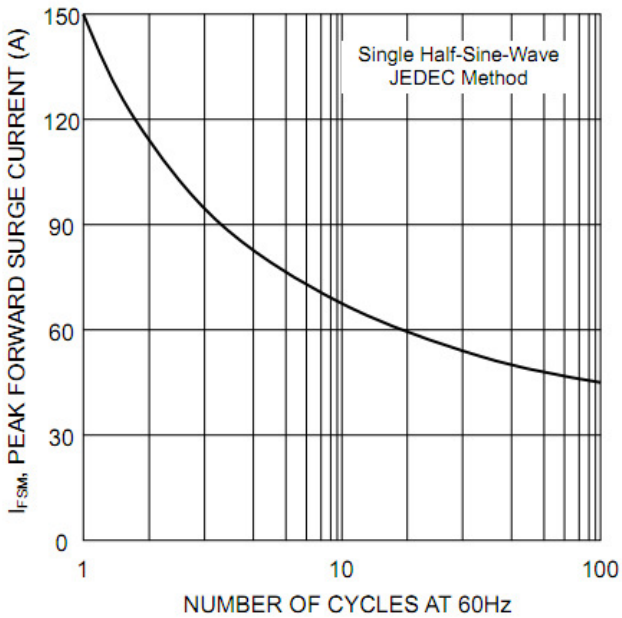


Fig. 3 Typical Reverse Characteristics

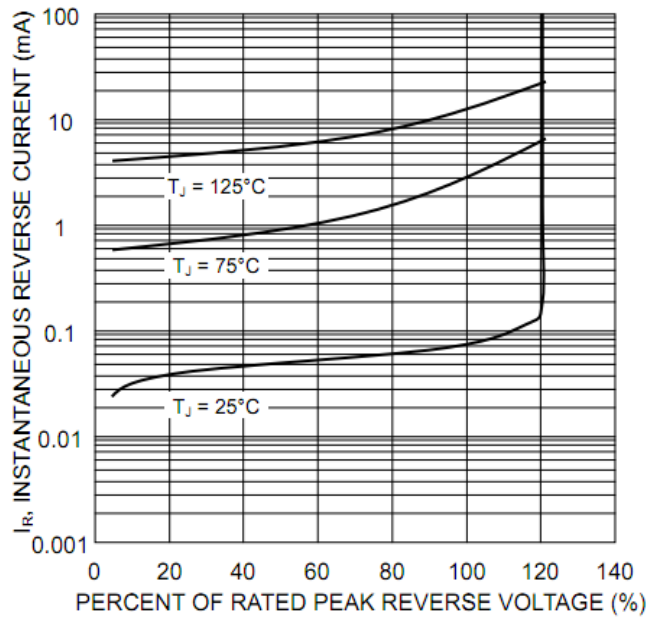


Fig. 4 Maximum Non-repetitive Peak Fwd Surge