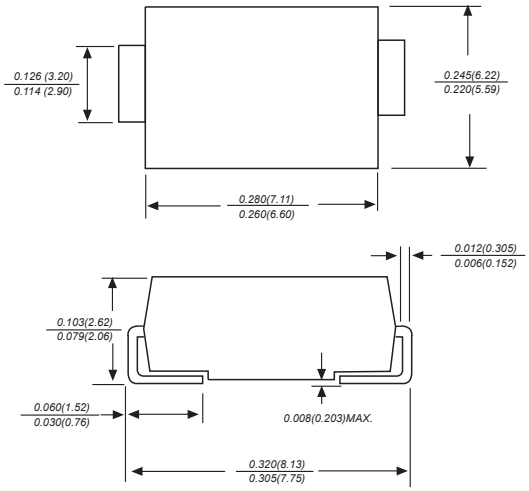
ES8A THRU ES8J

DO-214AB



Features

- High Surge Capability
- Low Forward Voltage Drop
- High Current Capability
- Super Fast Switching Speed For High Efficiency
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Maximum Ratings

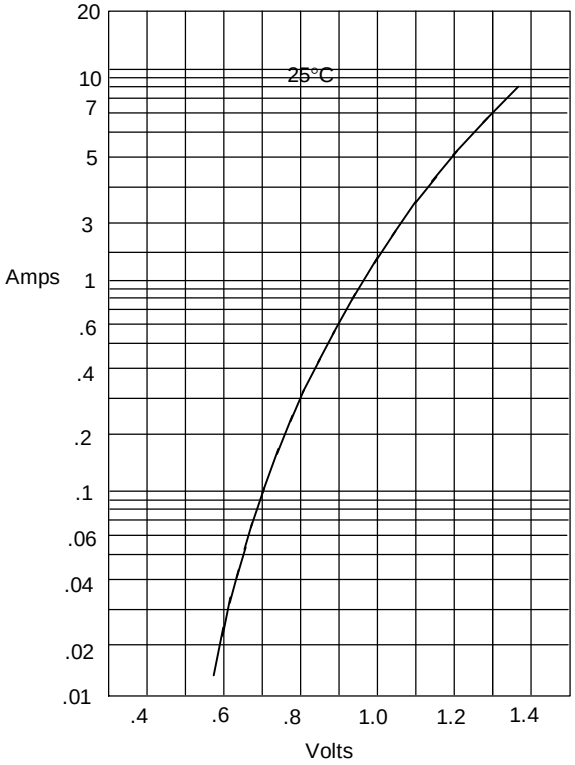
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ES8A	50V	35V	50V
ES8B	100V	70V	100V
ES8D	200V	140V	200V
ES8G	400V	280V	400V
ES8J	600V	420V	600V

Electrical Characteristics @ 25 C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8 A	T_A = 55°C
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.35V	I_{FM} = 8.0A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10μA	T_A = 25°C
Maximum Reverse Recovery Time ER8A-ER8G ER8J	T_{rr}	 50ns 60ns	I_F=0.5A, I_R=6.0A, I_{rr}=0.25A

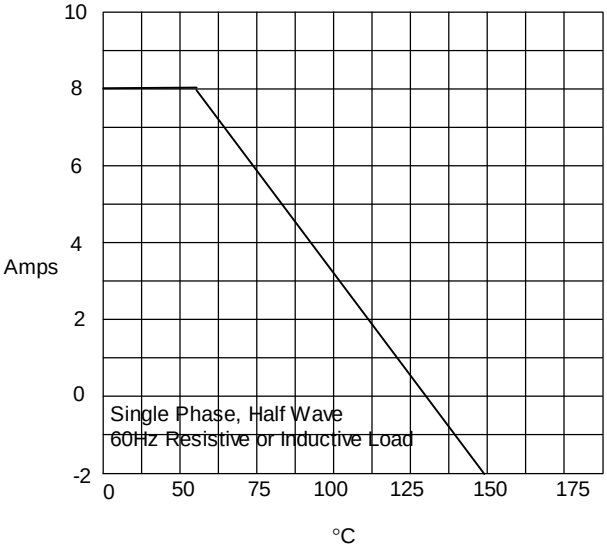
*Pulse Test: Pulse Width 300μsec, Duty Cycle 1%

Figure 1 Typical Forward Characteristics



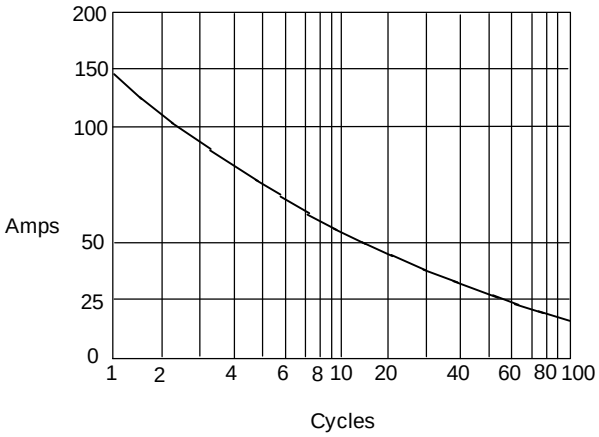
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles