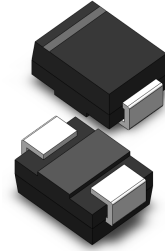


VOLTAGE RANGE: 50 - 600V
CURRENT: 5.0 A

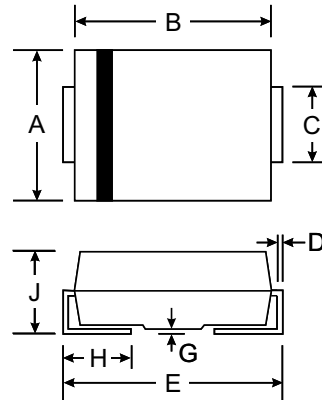
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

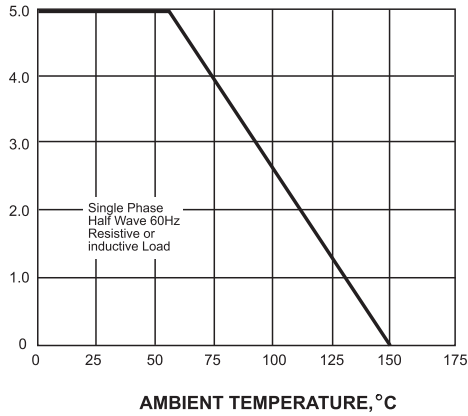
Characteristic	Symbol	ES5AB	ES5BB	ES5CB	ES5DB	ES5EB	ES5GB	ES5JB	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}									
Working Peak Reverse Voltage	V _{RWM}	50	100	150	200	300	400	600	V	
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	420	V	
Average Rectified Output Current @T _L = 75°C	I _O	5.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A	
Forward Voltage @I _F = 5.0A	V _{FM}	0.95				1.25		1.7	V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	5.0				50				μA
Reverse Recovery Time (Note 1)	t _{rr}	35								nS
Typical Junction Capacitance (Note 2)	C _j	180								pF
Typical Thermal Resistance (Note 3)	R _{θJL}	40								°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C	

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A. See figure 5.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 8.0mm² land area.



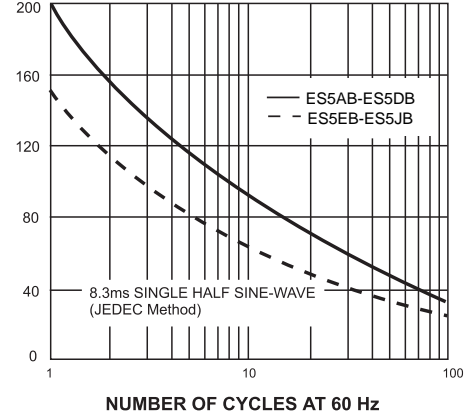
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



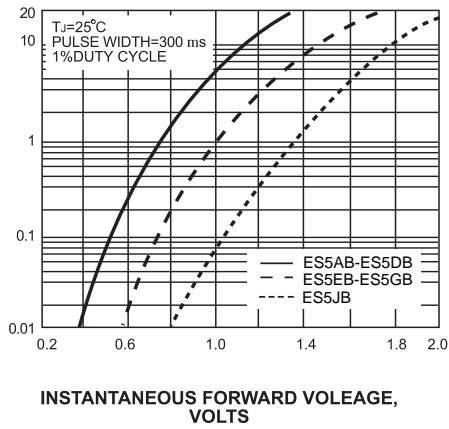
PEAK FORWARD SURGE CURRENT, AMPERES

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



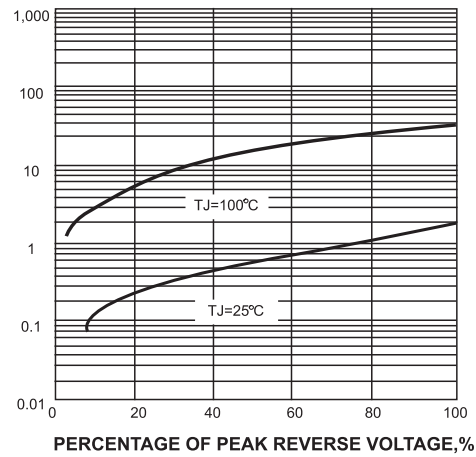
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



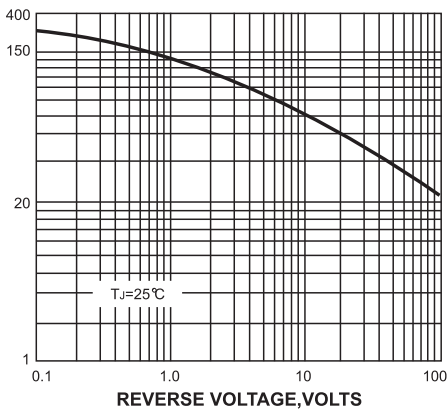
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

