



DESCRIPTION

The RB160M-30 is available in SOD-123 Package

FEATURES

- Small power mold typ.
- Low I_R
- High Reliability
- Available in SOD-123 Package

ORDERING INFORMATION

Package Type	Part Number
SOD-123	RB160M-30
Note	SPQ: 3,000pcs/Tape
AiT provides all RoHS Compliant Products	



ABSOLUTE MAXIMUM RATINGS

T_A=25°C

V _{RM} , Reverse Voltage	30V
V _R , Reverse Voltage	30V
I _o , Forward Current Surge Peak	1A
I _{FSM} , Average Rectified Forward Current	30A
T _J , Operating Junction Temperature	125°C
T _{STG} , Storage Temperature	-40°C~+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A = 25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V _{F1}	I _F = 0.5A	-	0.39	0.46	V
	V _{F2}	I _F = 1.0A	-	0.43	0.48	V
Reverse Current	I _{R1}	V _R = 15V	-	3.0	20	μA
	I _{R2}	V _R = 30V	-	9.0	50	μA



TYPICAL CHARACTERISTICS

T_A = 25°C

Figure 1. V_F-I_F Characteristics

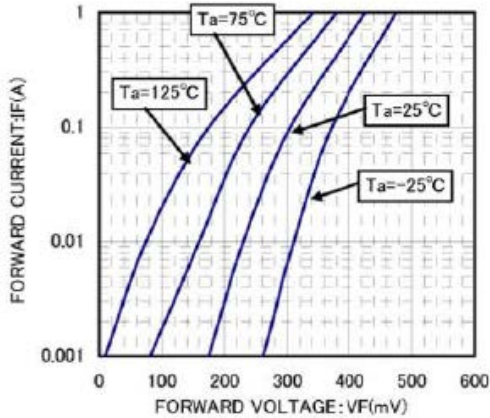


Figure 3. V_R-C_t Characteristics

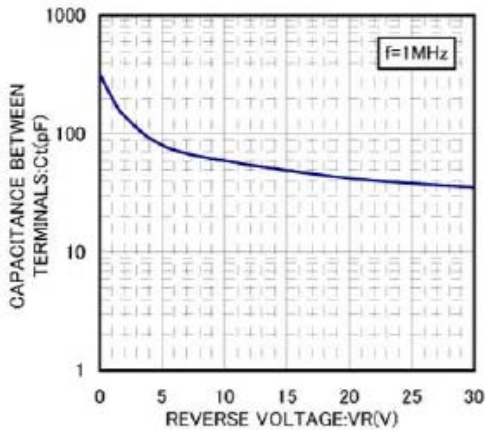


Figure 2. V_R-I_R Characteristics

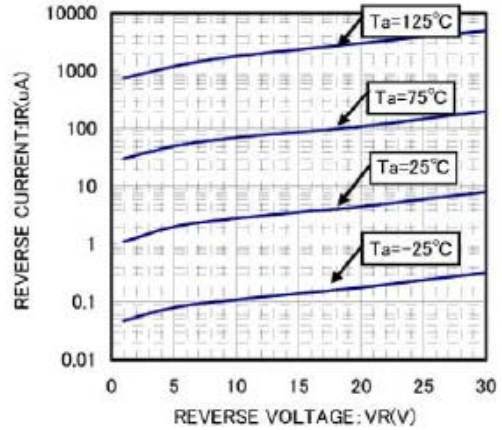


Figure 4. V_F Dispersion Map

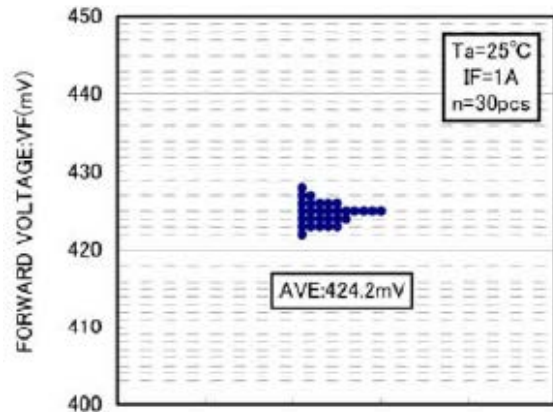


Figure 5. I_R Dispersion Map

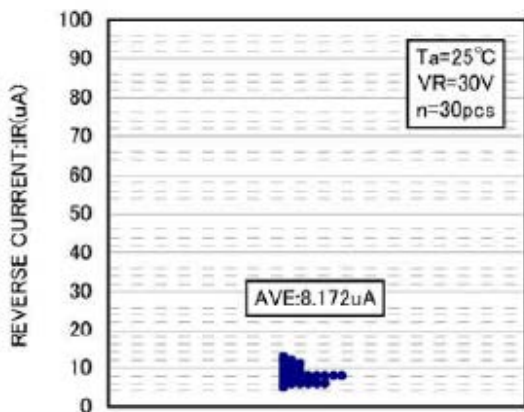


Figure 6. C_t Dispersion Map

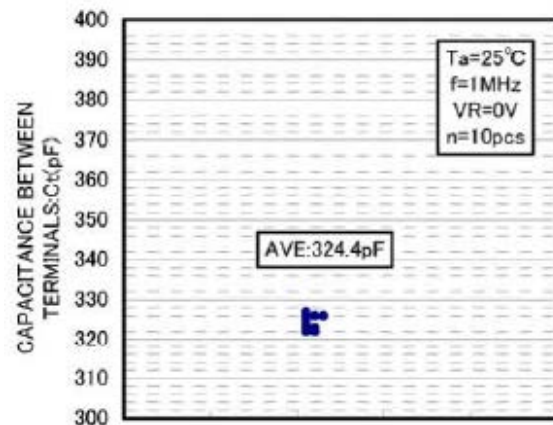


Figure 7. I_{FSM} Dispersion Map

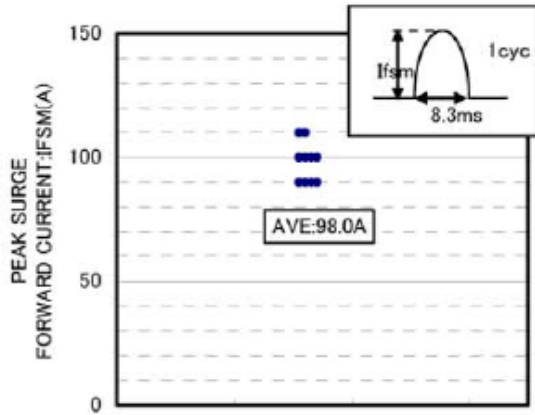


Figure 8. t_{rr} Dispersion Map

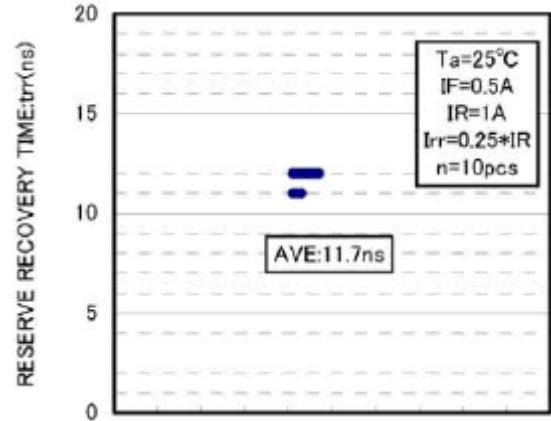


Figure 9. I_{FSM} -Cycle Characteristics

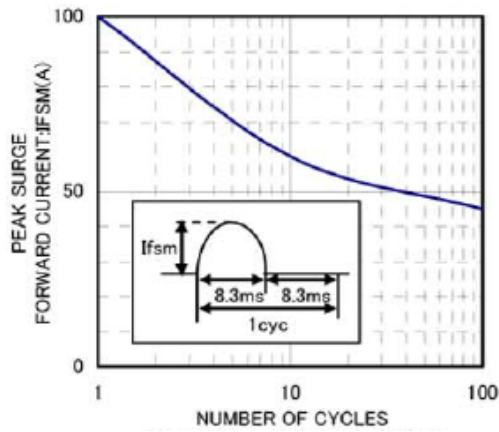


Figure 10. I_{FSM} -t Characteristics

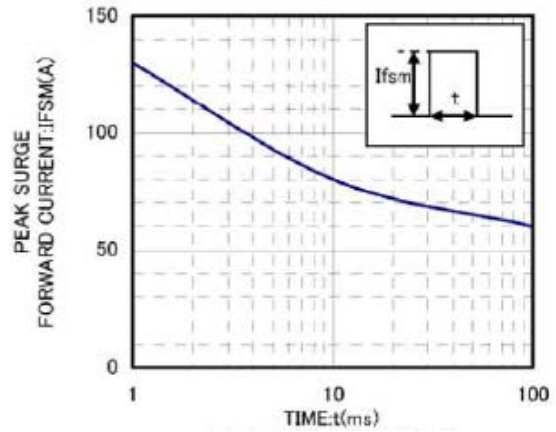


Figure 11. P_{th} -t Characteristics

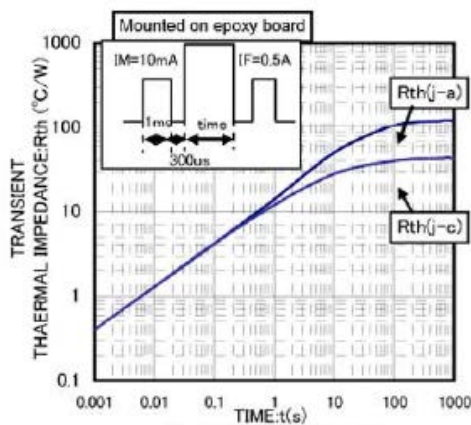
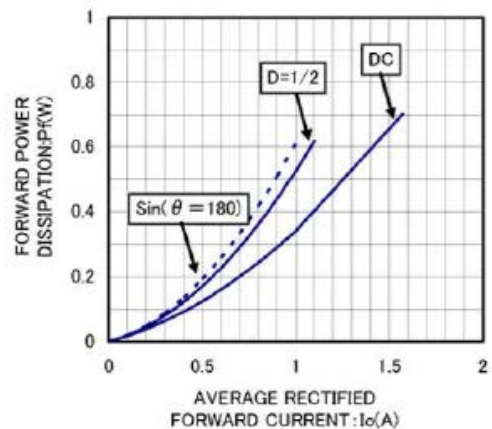


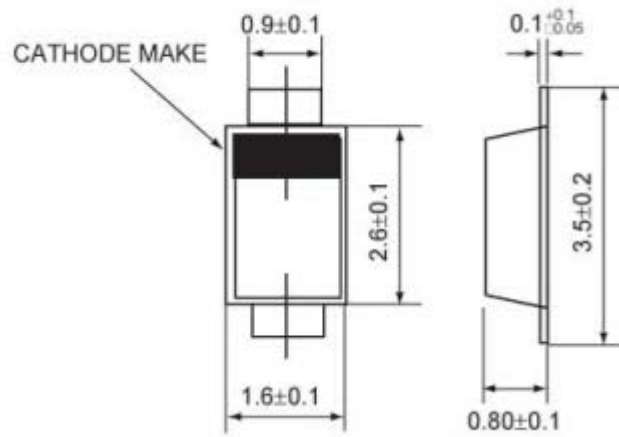
Figure 12. I_o -P_f Characteristics





PACKAGE INFORMATION

Dimension in SOD-123 Package





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