

SM220A thru SM2100A

Schottky Barrier Rectifiers
Reverse Voltage 20 to100V

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss,high efficiency
- * For use in low voltage high frequency inverters, free wheeling,and polarity protection applications
- * Guardring for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals

Mechanical Data

Case: JEDEC DO-214AC,

molded plastic over glass die

Terminals: Plated axial leads, solderable per

MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0026 oz., 0.075 g

Handling precautin:None



1.Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM220A	SM230A	SM240A	SM250A	SM260A	SM280A	SM2100 A	Unit	
device marking code		S22	S23	S24	S25	S26	S28	S210		
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V	
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$I_{F(AV)}$	2.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60								A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50								°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-40 to +150								°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM220A	SM230A	SM240A	SM250A	SM260A	SM280A	SM2100 A	Unit
Maximum instantaneous forward voltage at 2.0A	V_F	0.50			0.70		0.85		V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	I_R				0.5		10.0		mA
Typical junction capacitance at 4.0V, 1MHz	C_J				110				PF

NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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2. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

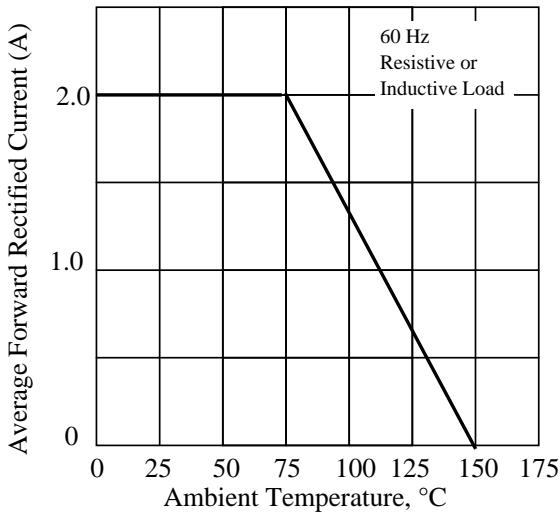


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

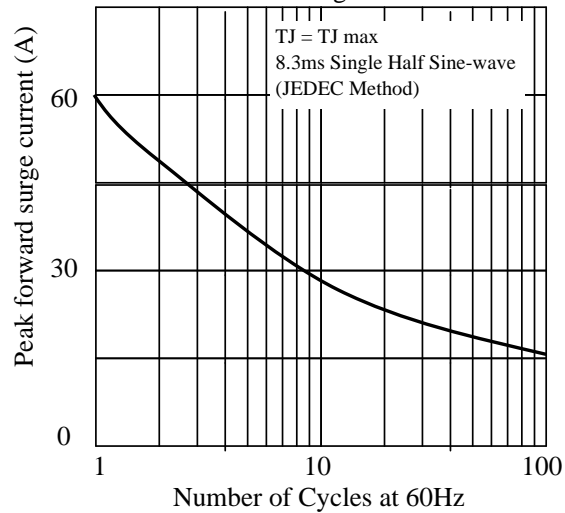


Fig. 3. - Typical Instantaneous Forward Characteristics

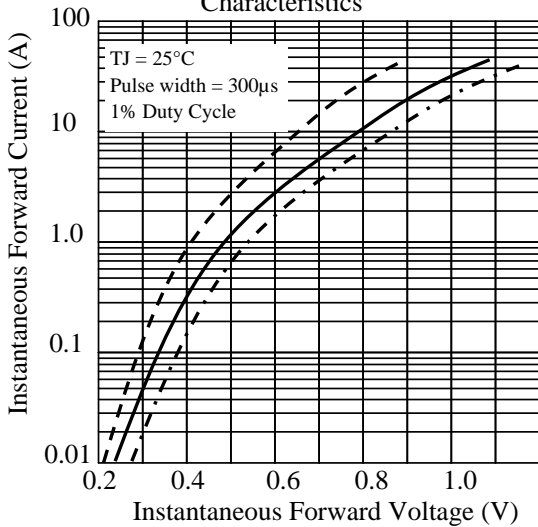


Fig. 4. - Typical Reverse Characteristics

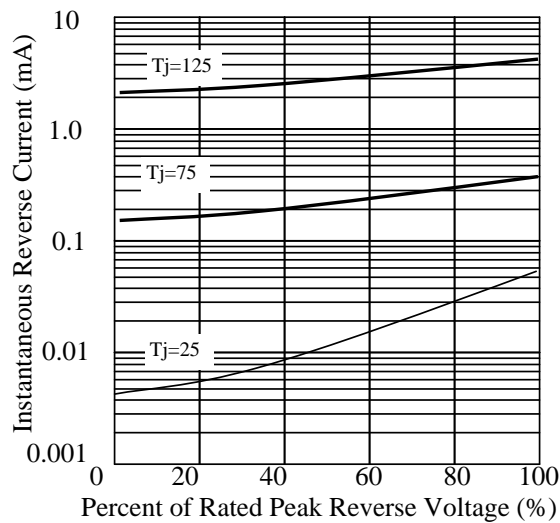


Fig 5. - typical transient thermal impedance

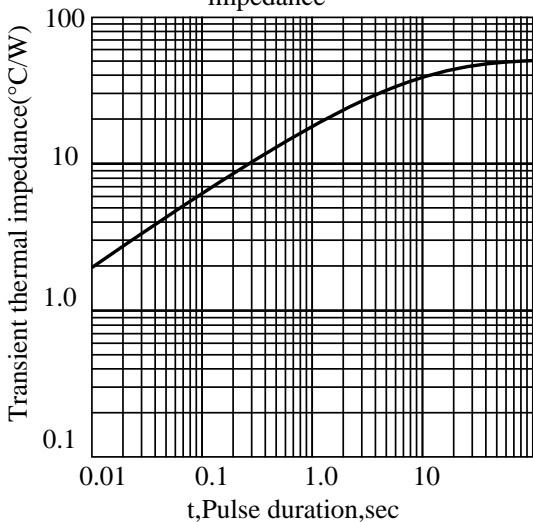
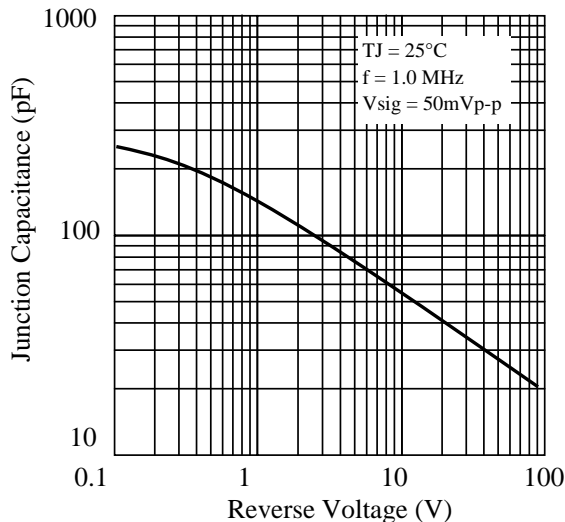
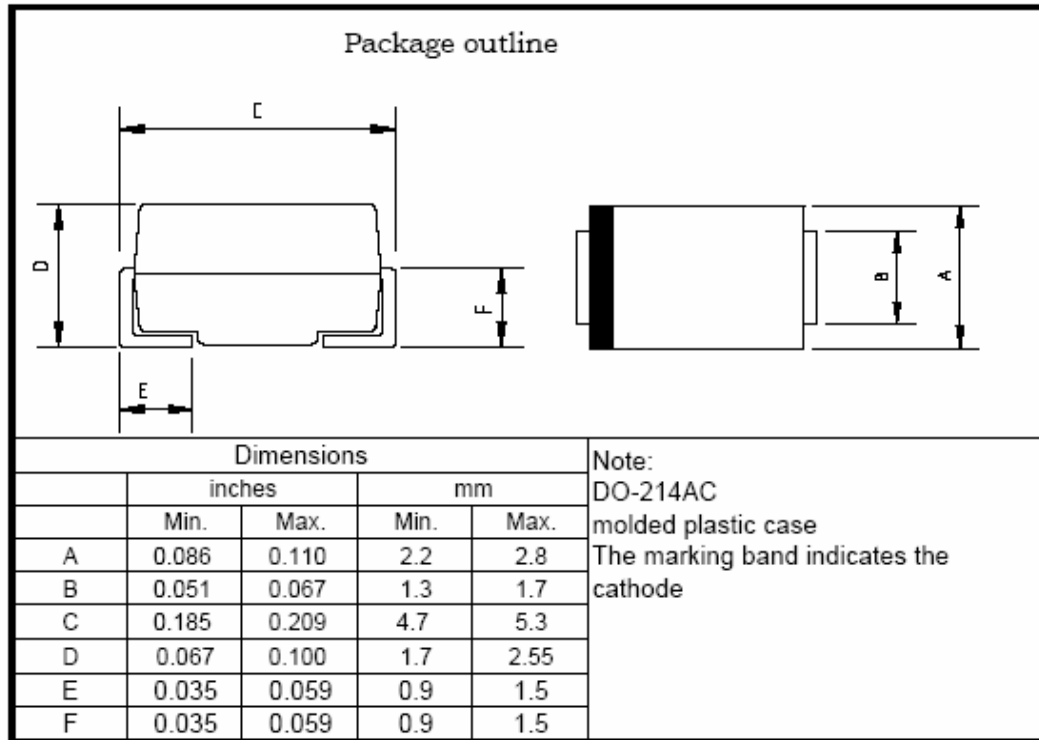


Fig 6. - Typical Junction Capacitance



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3. dimension:



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4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2010-3-23
2	结温由125度修改为150度	周杰	2010-9-23

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)