

HS3A /UF3A THRU HS3M/UF3M

**SURFACE MOUNT
HIGH EFFICIENCY (ULTRA FAST)
GLASS PASSIVATED RECTIFIERS**

**REVERSE VOLTAGE
50 to 1000 Volts
Forward Current
3.0 Amperes**

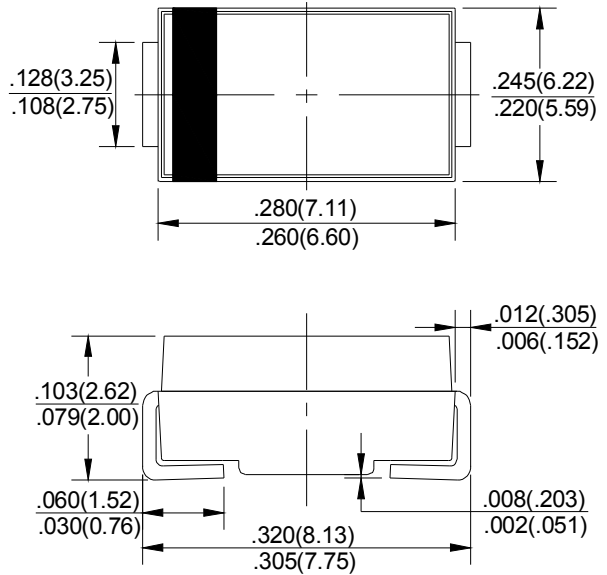
FEATURES

- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case: Molded Plastic
- Polarity: Color band denotes cathode
- Weight: 0.007 ounces, 0.21 grams
- Mounting position: Any

DO-214AB(SMC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	HS3A	HS3B	HS3D	HS3G	HS3J	HS3K	HS3M	UNIT	
		UF3A	UF3B	UF3D	UF3G	UF3J	UF3K	UF3M		
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @T _A =55 °C	I _(AV)	3.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	150							A	
Peak Forward Voltage at 3.0A DC	V _F	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	5.0			100				μA	
Maximum Reverse Recovery Time(Note 1)	T _{RR}	50				75			nS	
Typical Junction Capacitance (Note2)	C _J	50				30			pF	
Typical Thermal Resistance (Note3)	R _{θJA}	20							°C/W	
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

NOTES: 1.Measured with I_F=0.5A, I_R=1A , I_{RR}=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction to ambient

RATING AND CHARACTERISTIC CURVES HS3A /UF3A THRU HS3M/UF3M

FIG. 1 – FORWARD CURRENT DERATING CURVE

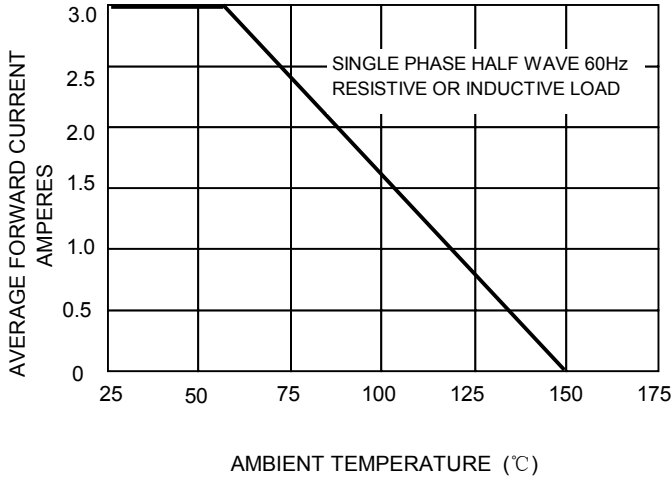


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

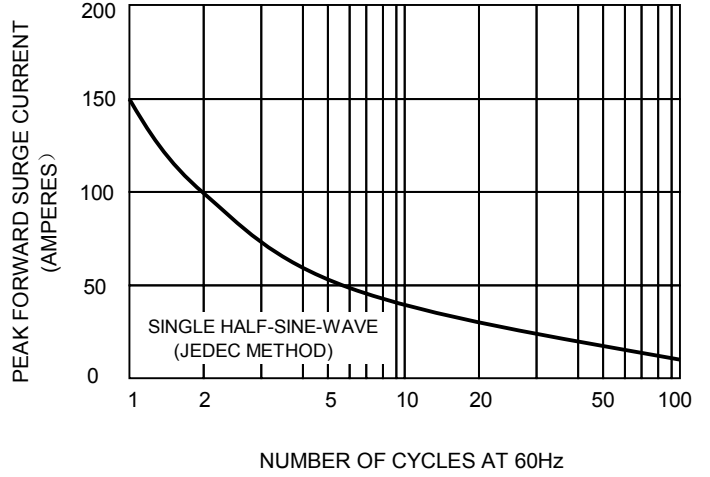


FIG.3 – TYPICAL JUNCTION CAPACITANCE

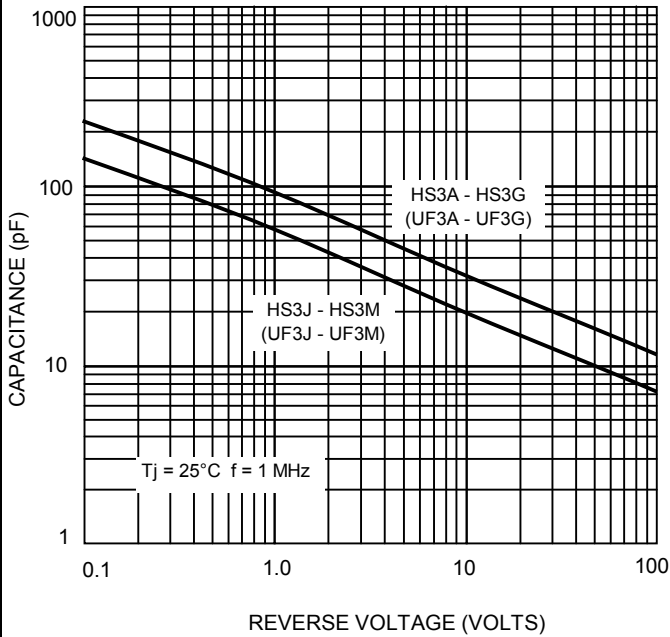


FIG.4-TYPICAL FORWARD CHARACTERISTICS

