

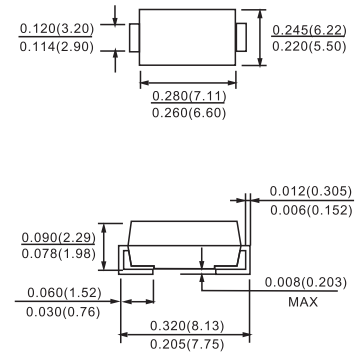
FEATURES

The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
For surface mounted applications
Low reverse leakage
Built-in strain relief, ideal for automated placement
High forward surge current capability
High temperature soldering guaranteed:
250°C/10 seconds at terminals
Glass passivated chip junction

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body over passivated chip
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.007 ounce, 0.25grams

DO-214AB(SMC)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

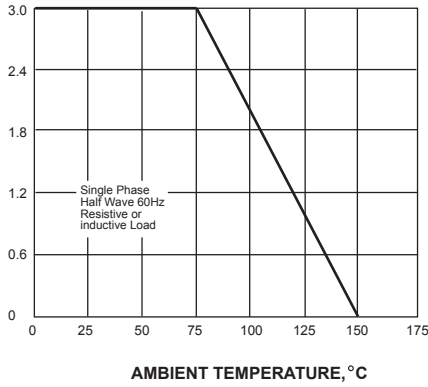
	SYMBOL	GS 3A	GS 3B	GS 3D	GS 3G	GS 3J	GS 3K	GS 3M	units	
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V _{rms}	35	70	140	280	420	560	700	V	
Maximum DC blocking Voltage	V _{dc}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current 3/8"lead length at T _L =75°C	I _{f(av)}	3.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	100.0								A
Maximum Forward Voltage at rated Forward current	V _f	1.1								V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	5.0 250								uA
Typical Reverse Recovery Time (Note 1)	T _{rr}	2.3								us
Typical Junction Capacitance (Note 2)	C _j	60.0								pF
Typical Thermal Resistance (Note 3)	R _{th(ja)} R _{th(jl)} R _{th(jc)}	47.0 13.0 28.0								°C/W
Storage and Operating Temperature Range	T _{stg}	-50 to +150								°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Measured at 1.0 MHz and applied voltage of 4.0Vdc
3. Thermal Resistance from junction to ambient and from junction to lead mounted on 8×8mm copper pad area

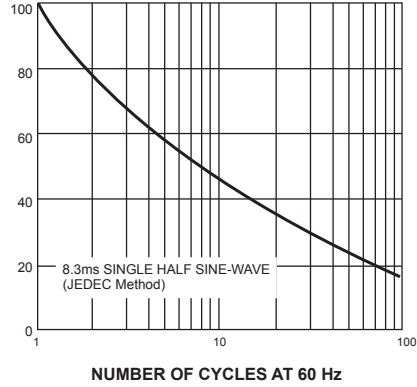
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



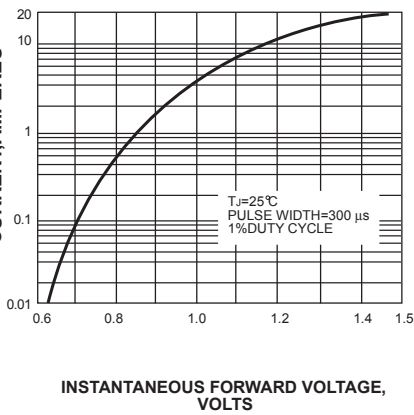
PEAK FORWARD SURGE CURRENT,
AMPERES

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



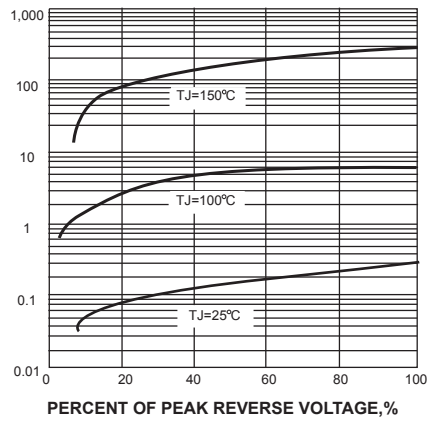
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



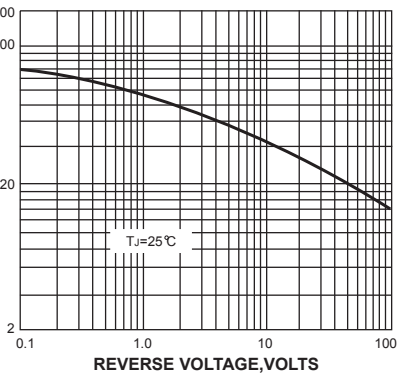
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

