

CURRENT 10 Ampere
 VOLTAGE RANG 50 to 1000 Volts

GS10AC THRU GS10MC

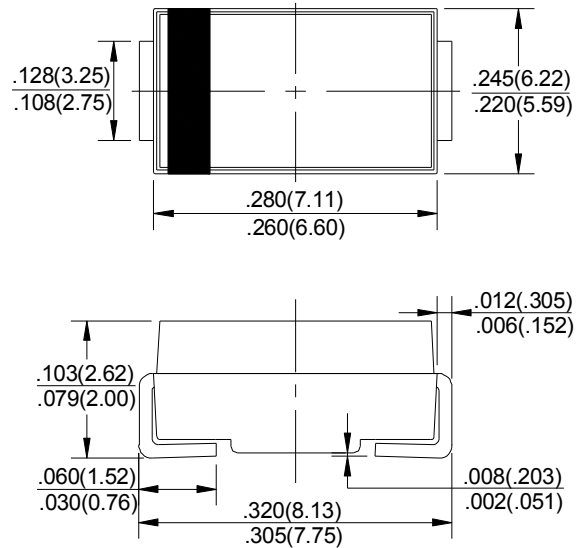
FEATURES

- ◆ 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

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic body
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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	GS10A	GS10B	GS10D	GS10G	GS10J	GS10K	GS10M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=75^\circ\text{C}$	$I_{(AV)}$	10.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0							Amps
Maximum instantaneous forward voltage at 10.0A	V_F	1.2							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	10.0 100.0							μA
Typical junction capacitance (NOTE 1)	C_J	60.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

*Pulse test: Pulse width 200 μsec , Duty cycle 2%

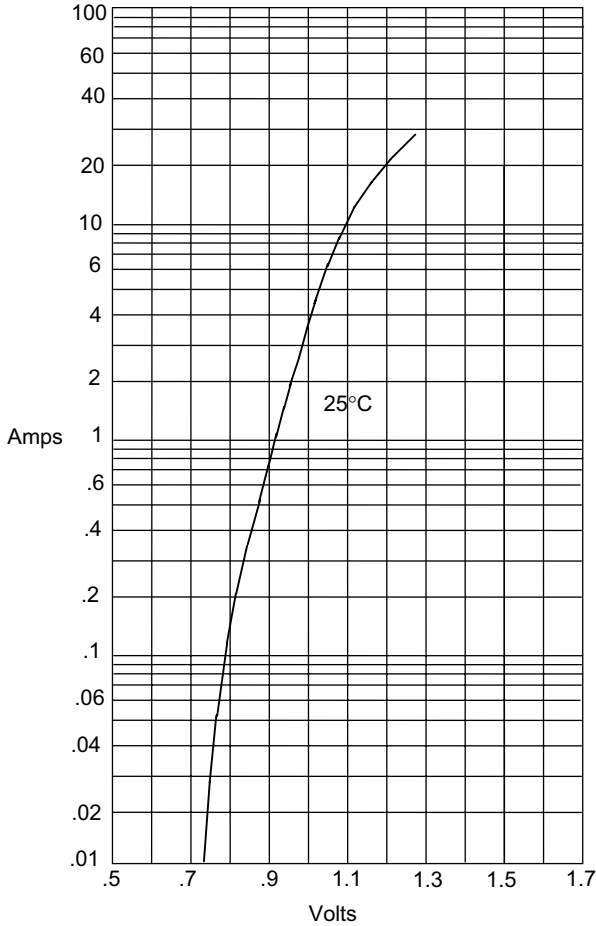
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

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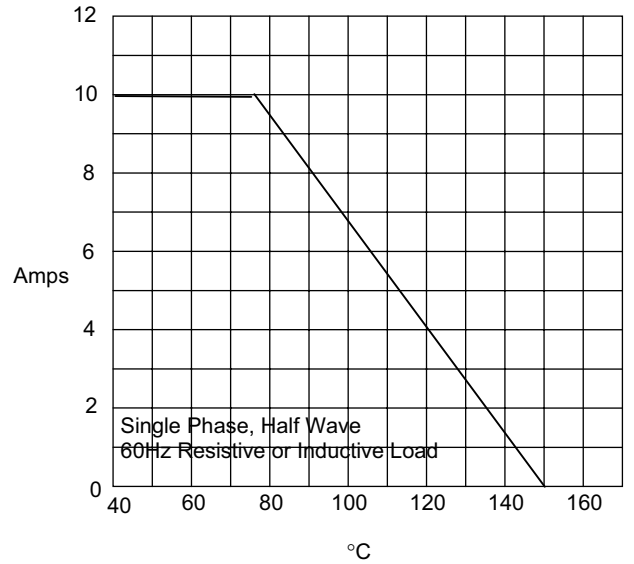
RATING AND CHARACTERISTIC CURVES GS10A Thru GS10M

Figure 1
 Typical Forward Characteristics



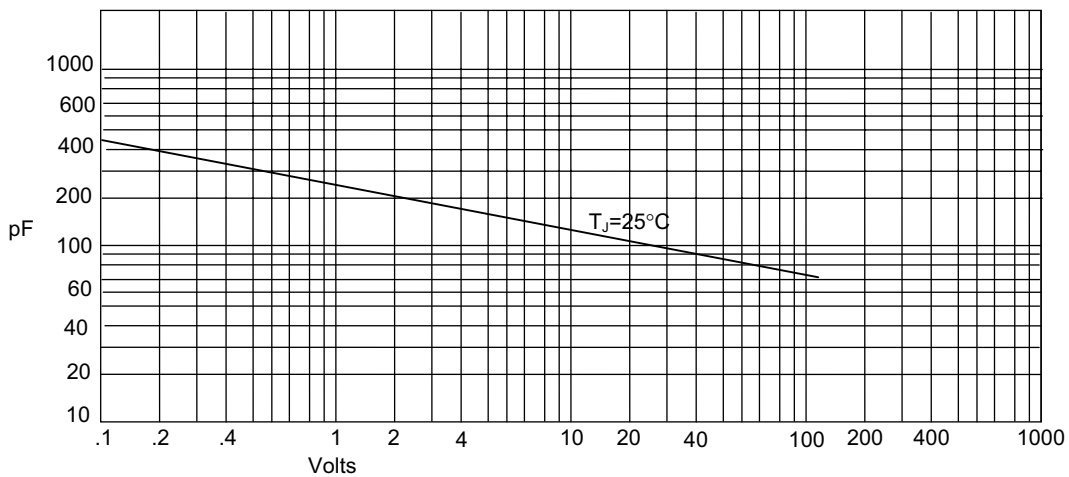
Instantaneous Forward Current - Amperes versus
 Instantaneous Forward Voltage - Volts

Figure 2
 Forward Derating Curve



Average Forward Rectified Current - Amperes versus
 Case Temperature - °C

Figure 3
 Junction Capacitance



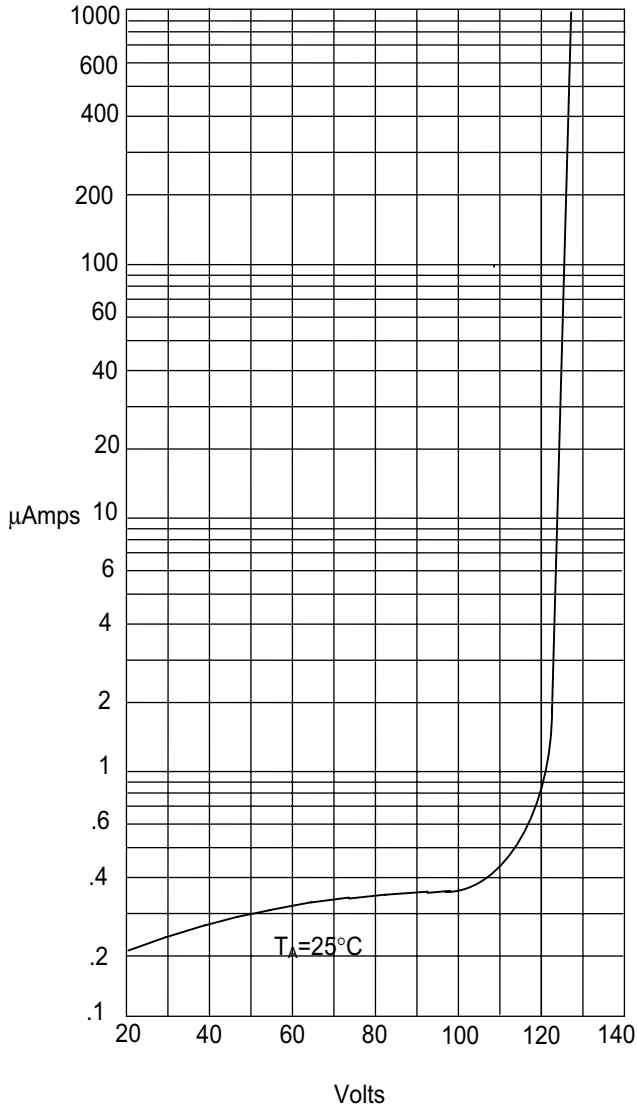
Junction Capacitance - pF versus
 Reverse Voltage - Volts

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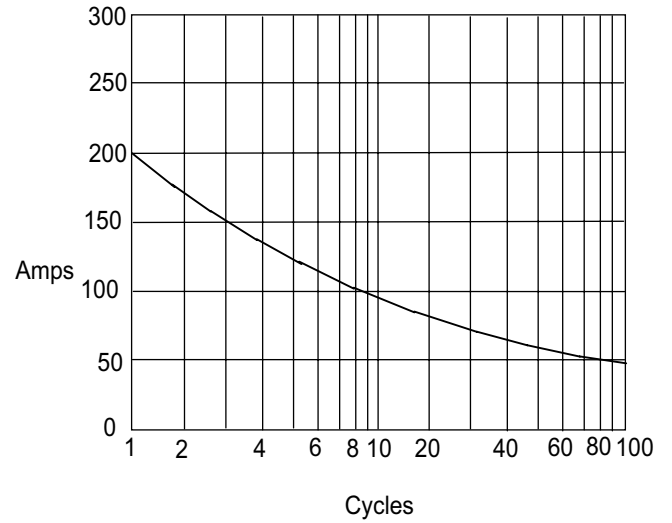
RATING AND CHARACTERISTIC CURVES GS10A Thru GS10M

Figure 4
 Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
 Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
 Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
 Number Of Cycles At 60Hz - Cycles