

FEATURES

The plastic package carries Underwriters Laboratory
Flammability Classification 94V-0
For surface mounted applications
Super fast switching for high efficiency
Low reverse leakage
Built-in strain relief,ideal for automated placement
High forward surge current capability
High temperature soldering guaranteed:
260°C/10 seconds at terminals
Glass passivated chip junction

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic body over passivated chip

Terminals: Solder plated, solderable per MIL-STD-750,

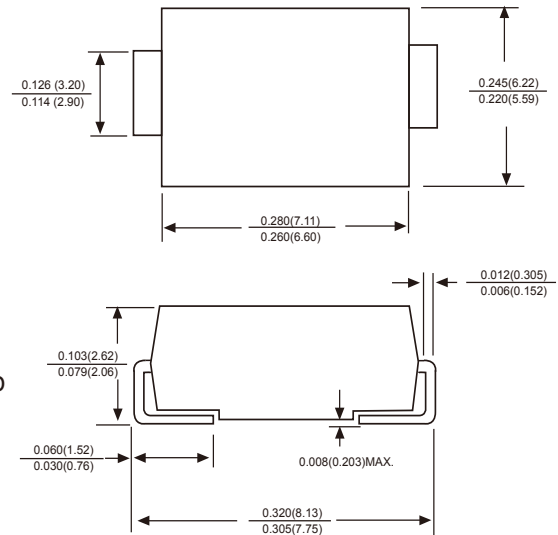
Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight:0.007 ounce, 0.25grams

SMC / DO-214AB



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%.

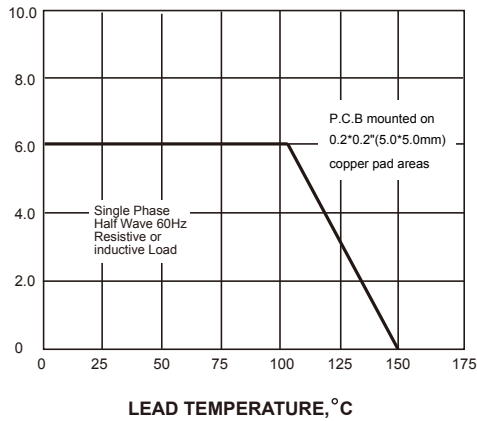
	SYMBOLS	GS6A	GS6B	GS6D	GS6G	GS6J	GS6K	GS6M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^{\circ}\text{C}$	$I_{(AV)}$	6.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	160.0							A
Maximum instantaneous forward voltage at 3.0A	V_F	1.1							V
Maximum DC reverse current $T_A=25^{\circ}\text{C}$ at rated DC blocking voltage $T_A=100^{\circ}\text{C}$	I_R	5.0 100.0							μA
Typical junction capacitance (NOTE 1)	C_J	100.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	47.0							$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

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

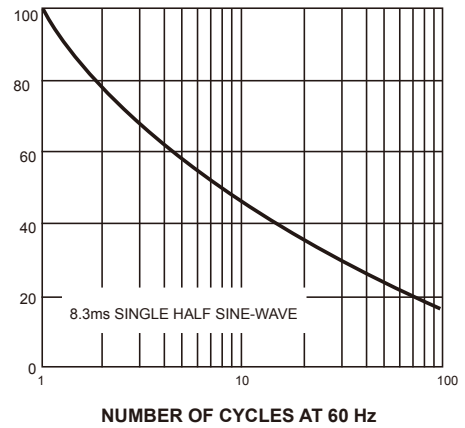
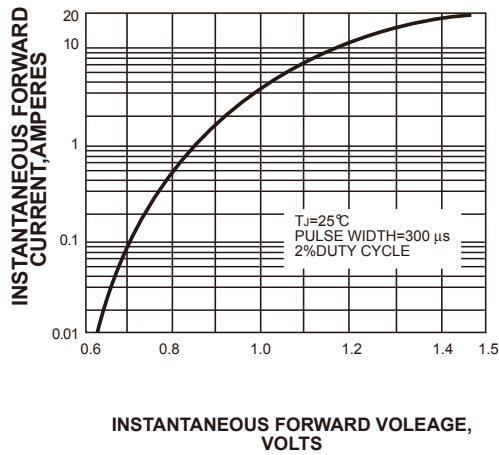


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

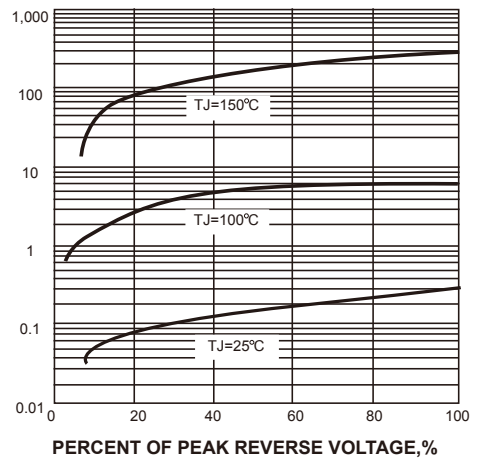
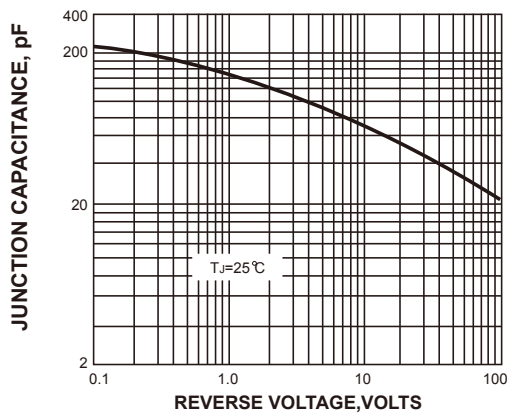


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

