



DO-214AC (SMA)

FEATURES

- For surface mounted applications
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
250 C/10 seconds at terminals
- Glass passivated chip junction

PRIMARY CHARACTERISTICS

IF(AV)	1.0 A
VRRM	50 V to 1000 V
IFSM	30 A
VF	1.1 V
IR	5.0 μ A
TJ max.	150°C

MECHANICAL DATA

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

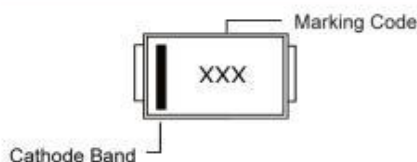
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight:0.064 grams

Part Marking System



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%.

PARAMETER	SYMBOL	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	UNIT
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 $T_A=75^{\circ}C$	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							Volts
Maximum DC reverse current $T_A=25^{\circ}C$	I_R	5.0							μA
at rated DC blocking voltage $T_A=100^{\circ}C$		50.0							
Typical junction capacitance (NOTE 1)	C_J	15.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75.0							$^{\circ}C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150							$^{\circ}C$

Ratings and Characteristic Curves ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

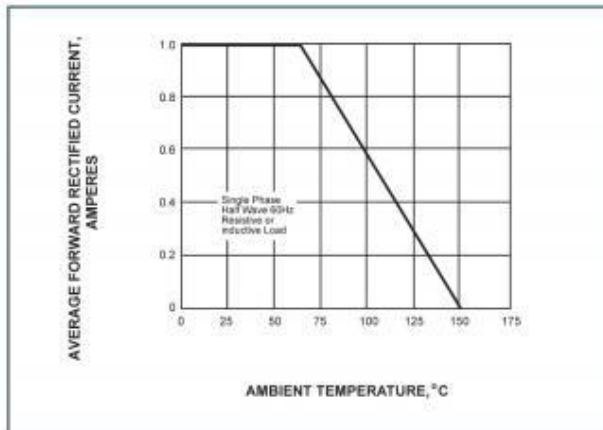


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

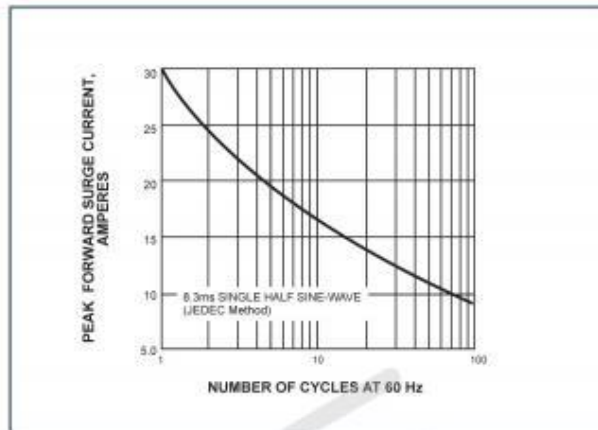


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

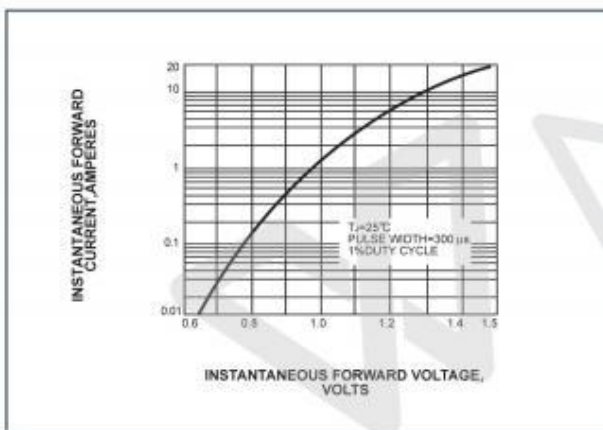
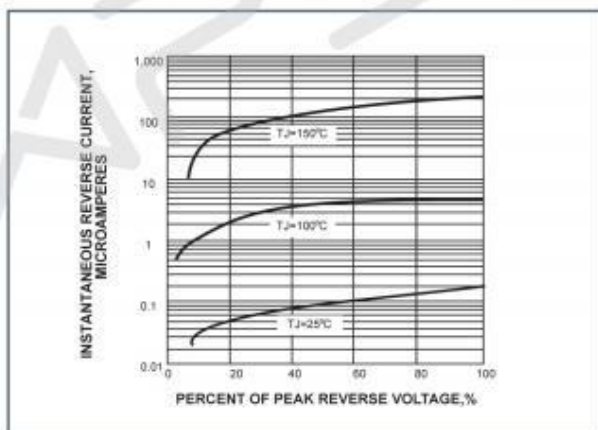
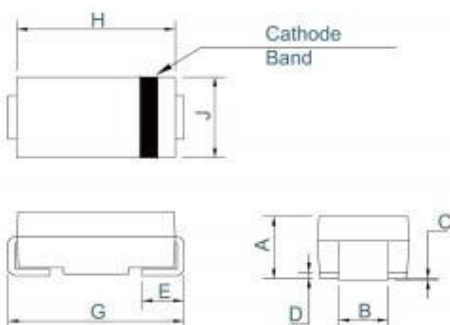


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Dimensions

SMA-(DO-214AC)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.067	0.091	1.70	2.31	
B	0.051	0.067	1.29	1.70	
C	0.002	0.008	0.05	0.20	
D	—	0.020	—	0.51	
E	0.030	0.060	0.76	1.52	
G	0.185	0.209	4.70	5.31	
H	0.157	0.181	4.00	4.60	
J	0.086	0.110	2.18	2.79	

TVS

Rectifiers

SKY

Zener

Switching

DIAC

Bridge