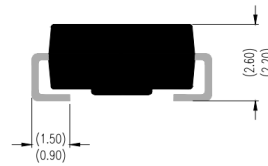
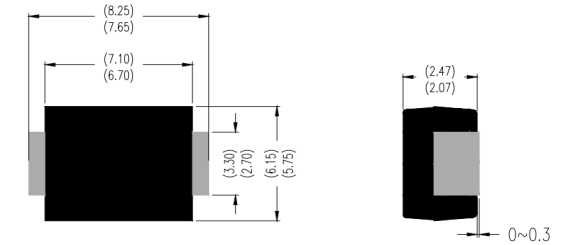


10A, 50V - 1000V Surface Mount Glass Passivated Rectifier

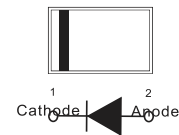
Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

DO-214AB (SMC)



Unit : inch(mm)



Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- Package: DO-214AB (SMC)
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes the cathode end

■ Maximum Ratings ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GS10AC	GS10BC	GS10DC	GS10GC	GS10JC	GS10KC	GS10MC
Maximum Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC Blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, Resistance load, TL (FIG.1)	I_o	A	10						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	I_{FSM}	A	200						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^{\circ}\text{C}$			400						
Current squared time @1ms≤t≤8.3ms $T_j=25^{\circ}\text{C}$, Rating of per diode	I^2t	A^2s	166						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C_j	pF	55						
Storage Temperature	T_{stg}	$^{\circ}\text{C}$	-55 ~ +150						
Junction Temperature	T_j	$^{\circ}\text{C}$	-55 ~ +150						

■ **Electrical Characteristics** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GS10AC	GS10BC	GS10DC	GS10GC	GS10JC	GS10KC	GS10MC	
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=10\text{A}$							1.1	
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	$T_j=25^{\circ}\text{C}$							5	
			$T_j=125^{\circ}\text{C}$							100	

■ **Thermal Characteristics** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GS10AC	GS10BC	GS10DC	GS10GC	GS10JC	GS10KC	GS10MC	
Typical Thermal resistance	$R_{\theta J-A(1)}$	$^{\circ}\text{C/W}$							50	
	$R_{\theta J-L(1)}$								10	
	$R_{\theta J-C(1)}$								8	

Note(1)

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas

■ **Characteristics(Typical)**

FIG.1: I_o -TL Curve

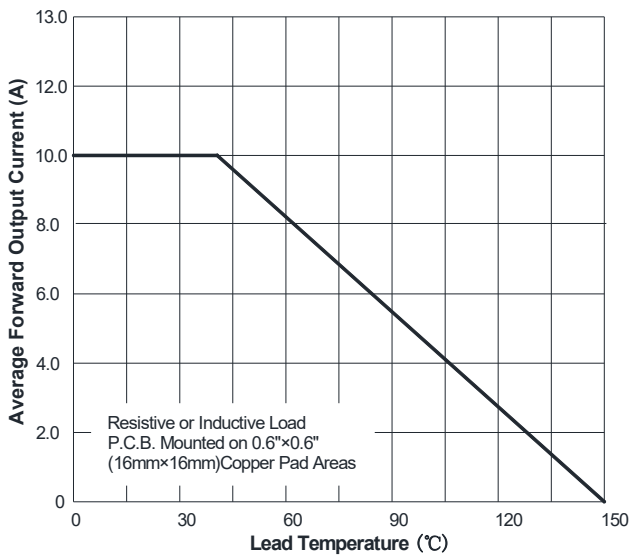


FIG.2: Forward Surge Current Capability

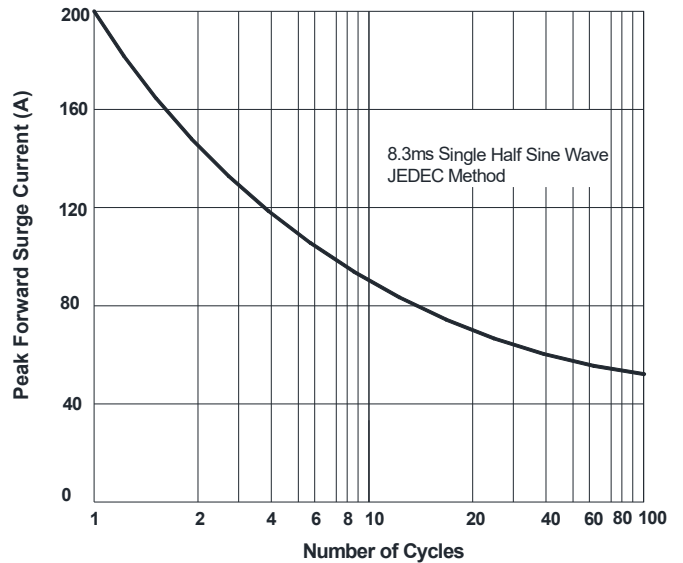


FIG.3: Typical Forward Voltage

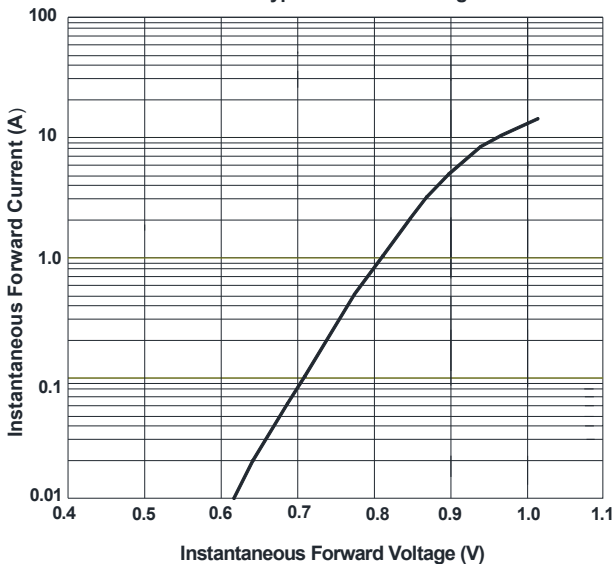


FIG.4: Typical Reverse Characteristics

