

SL12-A THRU SL120-A

1.0A Low VF Surface Mount Schottky Barrier Rectifiers -20V-200V

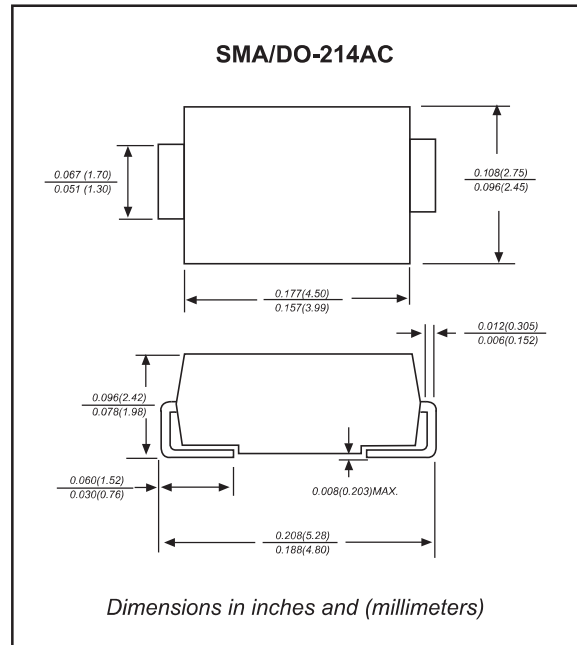
Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ For surface mounted applications
- ▶ Metal silicon junction, majority carrier conduction
- ▶ Low power loss, high efficiency
- ▶ Built-in strain relief, ideal for automated placement
- ▶ High forward surge current capability
- ▶ High temperature soldering guaranteed: 250°C/10 seconds at terminals
- ▶ Compliant to RoHS Directive 2011/65/EU
- ▶ Suffix "-H" indicates Halogen-free part, ex. SL14-A-H

Mechanical data

- ▶ **Case:** JEDEC DO-214AC molded plastic body
- ▶ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any

Package outline



Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I _O			1.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I _{FSM}			30	A
Reverse current	V _R = V _{RRM} T _A = 25°C	I _R			1.0	mA
	V _R = V _{RRM} T _A = 100°C				20	
Thermal resistance	Junction to ambient NOTE 1	R _{θJA}		88		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C _J		120		pF
Storage temperature		T _{STG}	-65		+150	°C

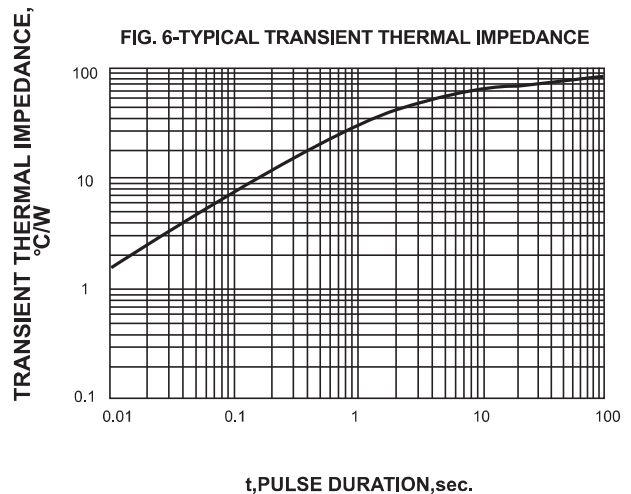
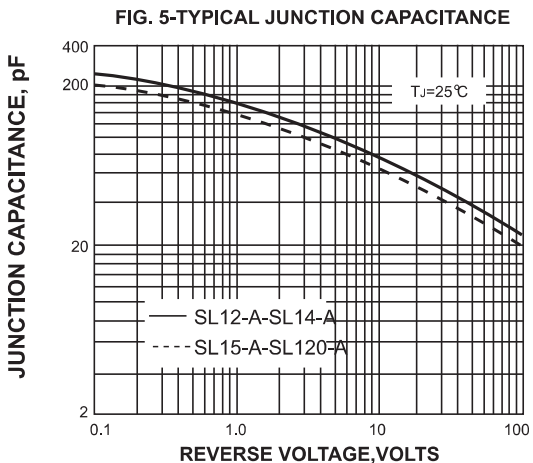
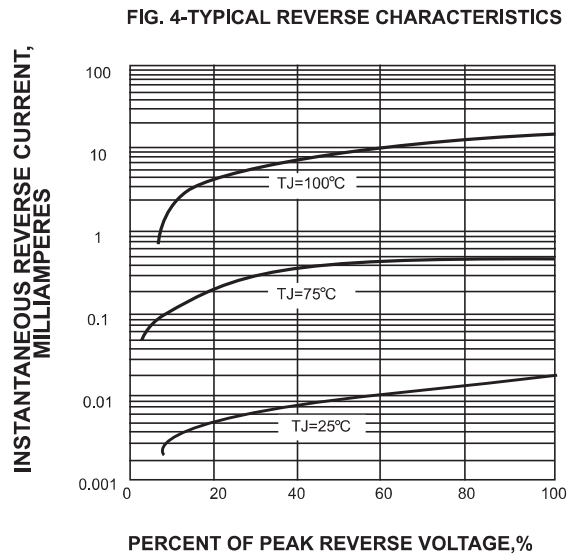
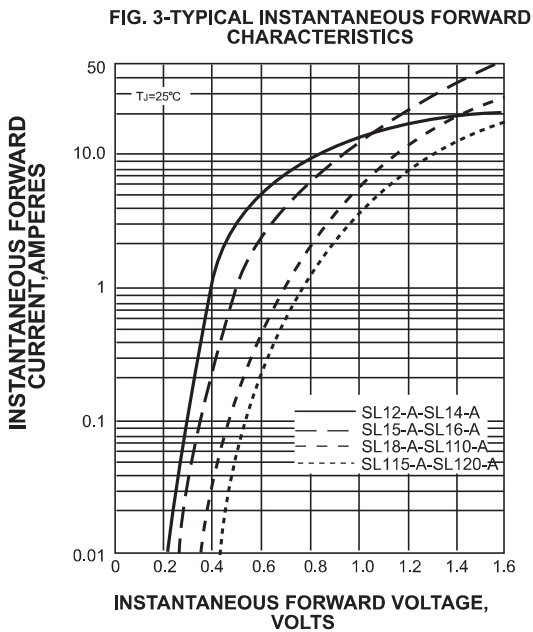
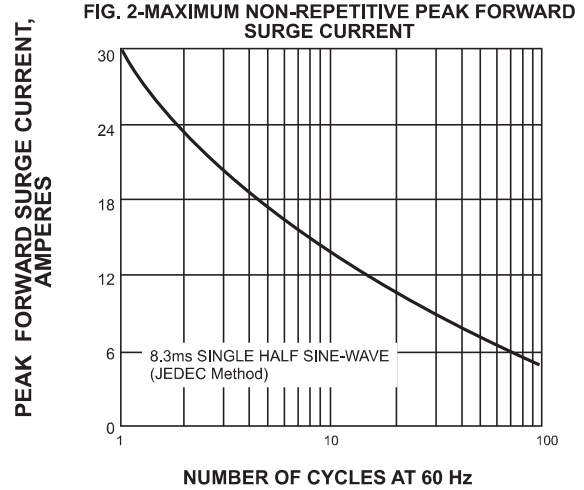
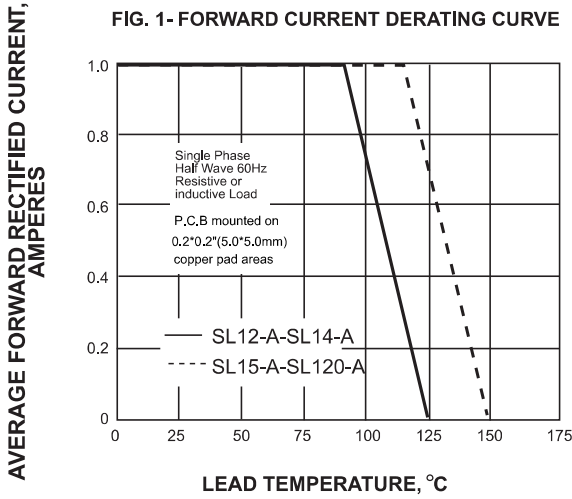
Note: 1.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

SYMBOLS	V _{RRM} ^{*1} (V)	V _{RMS} ^{*2} (V)	V _R ^{*3} (V)	V _F ^{*4} (V)	Operating temperature T _J , (°C)
SL12-A	20	14	20	0.45	-55 to +125
SL13-A	30	21	30		
SL14-A	40	28	40		
SL15-A	50	35	50	0.55	-55 to +150
SL16-A	60	42	60		
SL18-A	80	56	80	0.75	
SL110-A	100	70	100		
SL115-A	150	105	150	0.85	
SL120-A	200	140	200		

- *1 Repetitive peak reverse voltage
- *2 RMS voltage
- *3 Continuous reverse voltage
- *4 Maximum forward voltage@I_F=1.0A

SL12-A THRU SL120-A

Rating and characteristic curves



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Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example	
SL12-A	SL12	For Halogen Device	For Halogen-free Device
SL13-A	SL13		
SL14-A	SL14		
SL15-A	SL15		
SL16-A	SL16		
SL18-A	SL18		
SL110-A	SL110		
SL115-A	SL115		
SL120-A	SL120		

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMA	0.110 (2.80)	0.063 (1.60)	0.087 (2.20)