

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts    Forward Current - 1.0 Ampere

#### 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:  
260°C/10 seconds at terminals

#### Mechanical Data

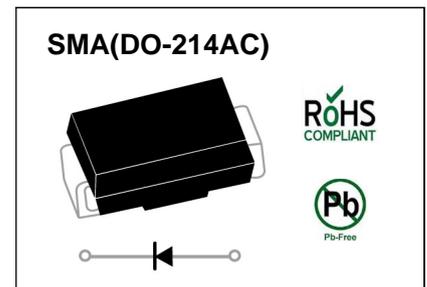
- Case:DO-214AC molded plastic body
- Terminals:Leads solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.002 ounce, 0.07 grams

#### Specification

##### Maximum Rating 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%.

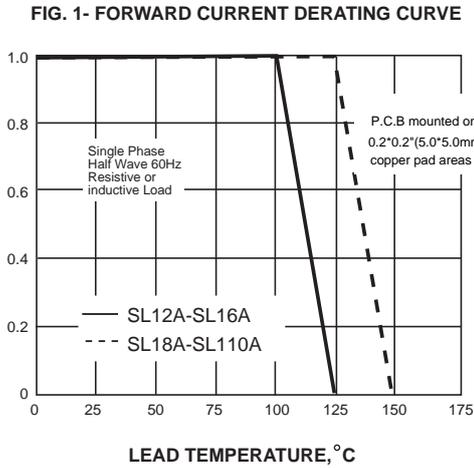


	SYMBOLS	SL12A	SL13A	SL14A	SL15A	SL16A	SL18A	SL110A	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum average forward rectified current at $T_L$ (see fig.1)	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30.0							A
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.45		0.5		0.7		V	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5				0.2		mA	
$T_A=25^\circ C$ $T_A=100^\circ C$		10.0				5.0			
Typical junction capacitance (NOTE 1)	$C_J$	110			90			pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75.0							°C/W
Operating junction temperature range	$T_J$	-55 to +125				-55 to +150			°C
Storage temperature range	$T_{STG}$	-55 to +150							°C

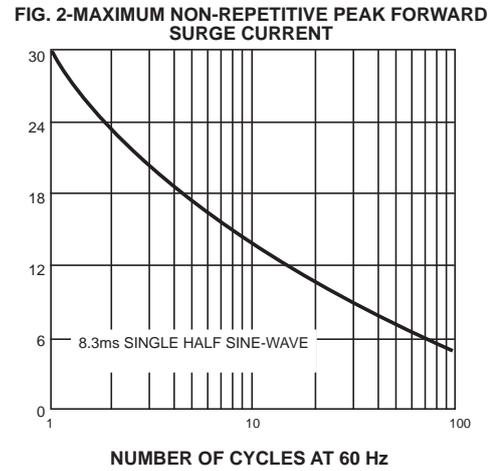
**Note:**1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2.P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas

### Ratings and characteristic curves SL12A thru SL110A

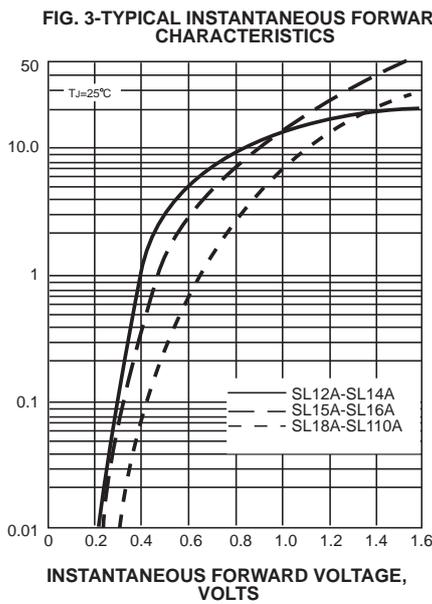
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



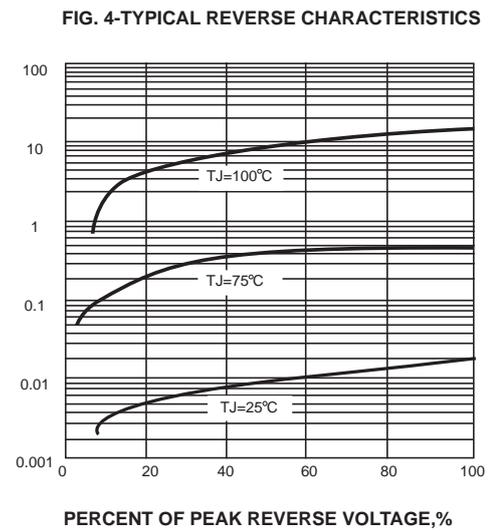
PEAK FORWARD SURGE CURRENT, AMPERES



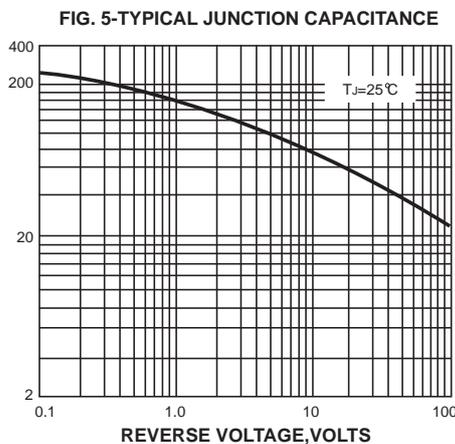
INSTANTANEOUS FORWARD CURRENT, AMPERES



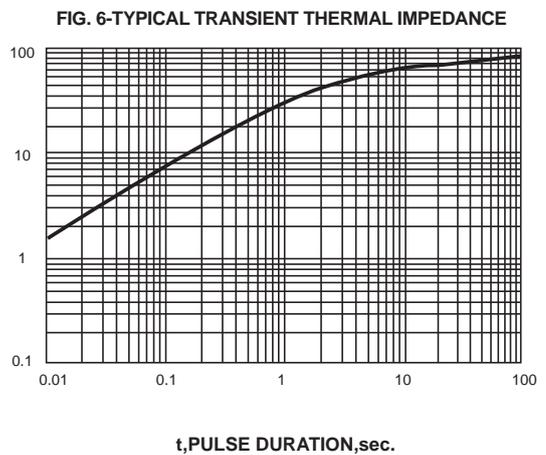
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W



### Marking and packing illustration

#### 1、Marking



SYMBOL	Explanation
A	Product Name

#### 2、Packaging



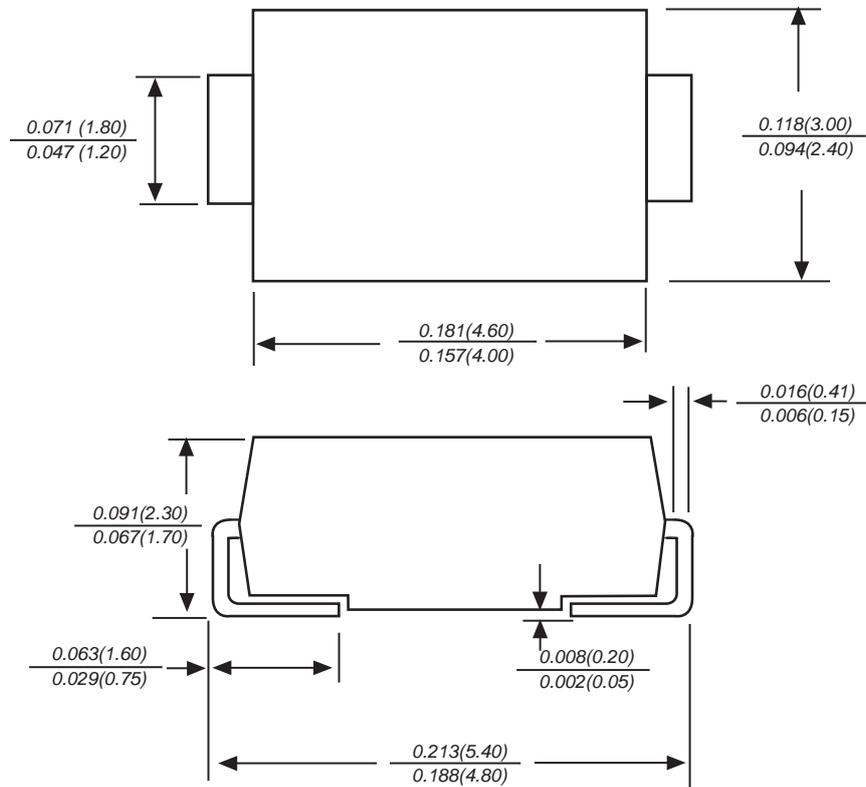
SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM ROL.	SMA (DO-214AC)	ITEM	SYM ROL.	SMA (DO-214AC)
Carrier width	A	3.17(0.125)Max	Carrier depth	K	2.42(0.095)Typ
Carrier length	B	5.81(0.229)Max	Punch hole pitch	P	4.00(0.157)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	178.0(7)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.55(0.219)Typ			

#### 3、Ordering Information

Part Number	Compliance	Case	Packaging
SSXX	Standard	SMA	2000/Tape & Reel

### Dimension

#### SMA(DO-214AC)



*Dimensions in inches and (millimeters)*

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