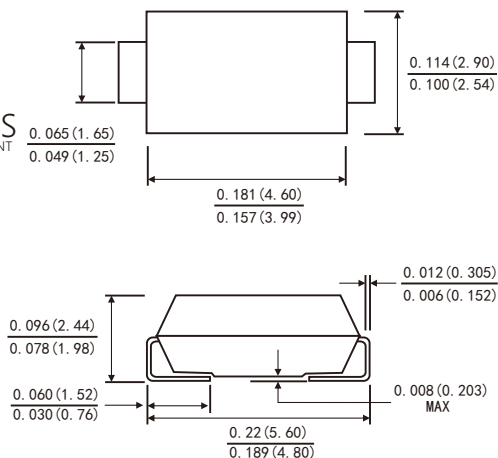


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



SMA(DO-214AC)



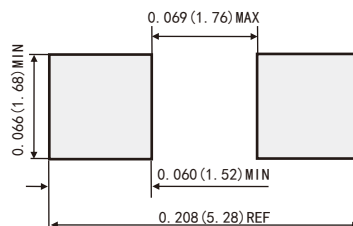
MECHANICAL DATA

- Case: JEDEC SMA(DO-214AC) molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002ounce, 0.064 gram

TYPICAL APPLICATIONS

For use in low voltage ,high frequency inverters ,DC/DC converters, free wheeling ,and polarity protection applications

Suggested PAD Layout



Dimensions in inches and (millimeters)

MAXIMUM RATINGS

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum average forward rectified current	$I_{F(AV)}$	3.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	80	A
Operating junction temperature range	T_J	-55 to+150	°C
Storage temperature range	T_{stg}	-55 to+150	°C

RATINGS AND CHARACTERISTIC OF SS34L

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instaneous forward voltage	$I_F=3.0\text{A}$	$T_A=25^{\circ}\text{C}$	$V_F^{1)}$	0.45	0.47	V
		$T_A=100^{\circ}\text{C}$		0.39	-	
		$T_A=125^{\circ}\text{C}$		0.37	-	
Reverse current	$V_R=40\text{V}$	$T_A=25^{\circ}\text{C}$	$I_R^{2)}$	60	200	μA
		$T_A=100^{\circ}\text{C}$		5	10	mA
		$T_A=125^{\circ}\text{C}$		15	30	
Typical junction capacitance	4V,1MHz		C_J	240		pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Pulse test: pulse width \leq 40ms

THERMAL CHARACTERISTICS

Parameter	Symbol	SMA	Unit
Typical thermal resistance ³⁾	$R_{\theta JA}$	88.0	$^{\circ}\text{C}/\text{W}$
	$R_{\theta JL}$	28.0	

3.P.C.B. mounted with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

AVAILABALE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Box Size L×W×H (mm)	Quantity (reel/box)	Carton Size L×W×H (mm)	Quantity (box/carton)
SS34L-SMA	T/R	ϕ 330	5000	330×333×35	2	364×364×360	8

RATINGS AND CHARACTERISTIC OF SS34L

FIG.1-FORWARD CURRENT DERATING CURVE

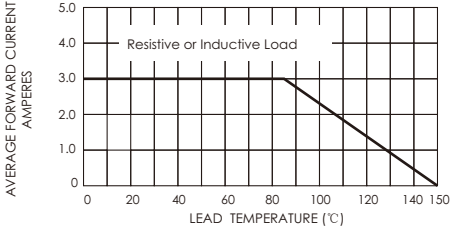


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

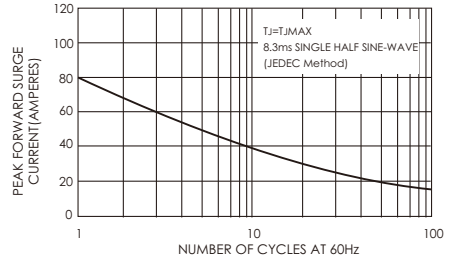


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

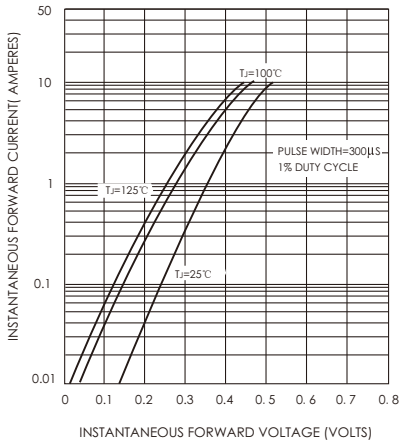


FIG.4-TYPICAL REVERSE CHARACTERISTICS

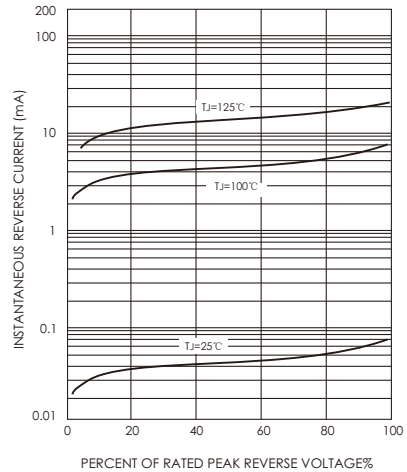


FIG.5-TYPICAL JUNCTION CAPACITANCE

