LOW VF SCHOTTKY BARRIER RECTIFIER

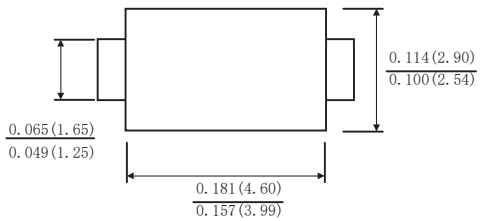
Features :

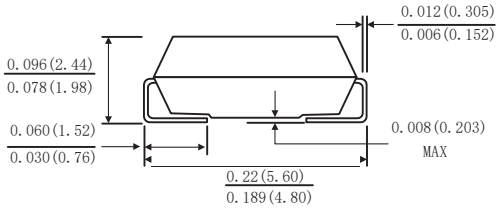
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU
- **AEC-Q101 qualified and PPAP capable**

Pb RoHS COMPLIANT

Reverse Voltage - 100 Volts
Forward Current - 4.0Amperes

SMA(DO-214AC)





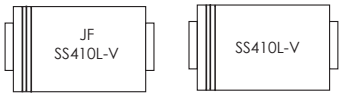
Mechanical Data :

- 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

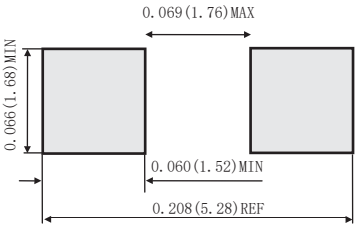
Application :

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

Marking:



Suggested PAD Layout



Dimensions in inches and (millimetrers)

MAXIMUM RATINGS

(Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	KWSS410L-V	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum average forward rectified current (see fig.1)	$I_{F(AV)}$	4.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	150	A
Operating junction temperature range	T_J	-55 to+175	℃
Storage temperature range	T_{stg}	-55 to+175	℃

RATINGS AND CHARACTERISTIC OF KWSS410L-V

ELECTRICAL CHARACTERISTCS（T_A=25℃ Unless otherwise noted）

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instaneous forward voltage	I_F=1.0A	T_A= 25℃	V_F 1)	0.44	0.48	V
		T_A=125℃		0.35	0.38	
	I_F=4.0A	T_A= 25℃		0.60	0.66	
		T_A=125℃		0.53	0.57	
Reverse current	V_R=100V	T_A= 25℃	I_R 2)	3	9	μA
		T_A=125℃		2	5	mA
Typical junction capacitance	100V, 1MHz		C_J	55		pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
2.Pulse test: pulse width≤40ms

THERMAL CHARACTERISTCS（T_A=25℃ Unless otherwise noted）

Parameter	Symbol	KWSS410 L-V	Unit
Typical thermal resistance 3)	$R_{\theta JA}$	88.0	℃/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)
KWSS410L-V	T/R	Φ330	7500	330×35×333	2	364×364×360	8

RATINGS AND CHARACTERISTIC OF KWSS410L-V

FIG.1-FORWARD CURRENT DERATING CURVE

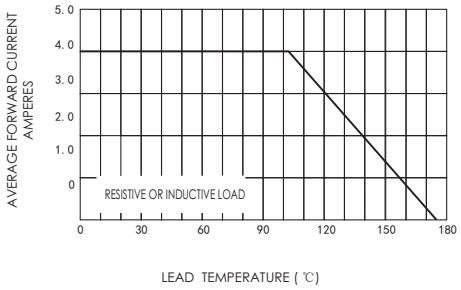


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

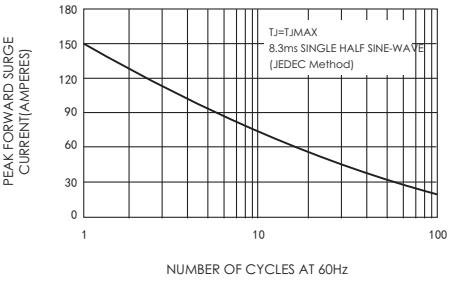


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

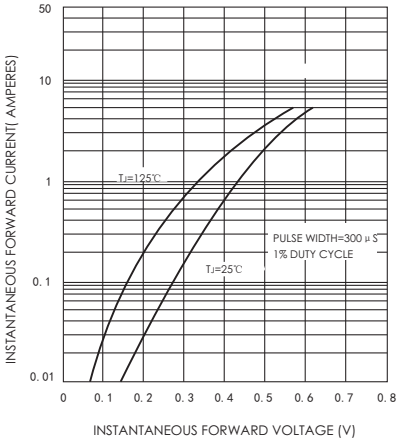


FIG.4-TYPICAL REVERSE CHARACTERISTICS

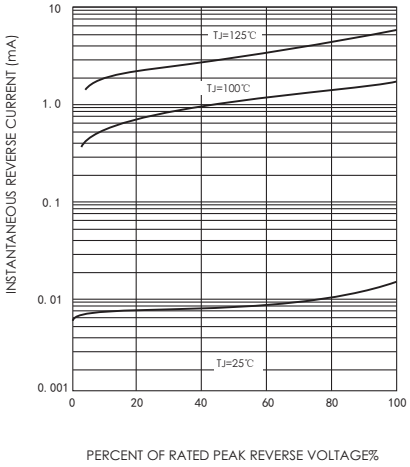


FIG.5-TYPICAL JUNCTION CAPACITANCE