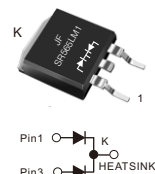


Features

- 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 2015/863/EU



TO-252
SR565LM1



Mechanical Data

- Case: JEDEC TO-252 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Typical Applications

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

PRIMARY CHARACTERISTICS	
$I_F(AV)$	2×2.5A
V_{RRM}	65V
IFSM(Per device)	150A
V_F at $I_F=2.5A$ (Per Leg)	0.53V
T_{JMAX}	150°C

Maximum Ratings

(Ratings at 25°C , ambient temperature unless otherwise specified with Pin1 and Pin3 short-circuited)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum average forward rectified current (Per device) (see fig.1)	$I_F(AV)$	5.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load,Per device (JEDEC method at rated TL)	IFSM	150	A
Operating junction temperature range	T_J	-55 to+150	°C
Storage temperature range	T_{stg}	-55 to+150	°C

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

Parameter	Test Conditions		Symbol	Typ.	Max.	Unit
Instaneous forward voltage	T _J =25°C	I _F =0.5A	V _F ¹⁾	0.40	-	V
		I _F =1.0A		0.44	-	
		I _F =2.5A		0.53	0.58	
		I _F =5.0A		0.64	-	
	T _J =125°C	I _F =0.5A		0.30	-	
		I _F =1.0A		0.34	-	
		I _F =2.5A		0.47	0.52	
		I _F =5.0A		0.58	-	
Reverse current	T _J =25°C	V _R =65V	I _R ²⁾	-	20	μA
	T _J =125°C			-	15	mA
	T _J =125°C			-	5.5	
Typical junction capacitance	4V,1MHz		C _J	150		pF

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

2.Pulse test: pulse width \leq 40ms

Thermal Characteristcs

Parameter	Symbol	TO-252	Unit
Typical thermal resistance ³⁾	$R_{\theta JC}$	2.5	$^{\circ}\text{C}/\text{W}$

3.Thermal resistance from junction to case

Availabale Pack Information

Product code	Package	Box Size L×W×H(mm)	Quantity(pcs/box)	Carton SizeL×W×H(mm)	Quantity(box/carton)
SR565LM1-TO-252	P/T	558×148×38	4000	565×225×170	5
SR565LM1-TO-252	Tape & reel(13")	346×346×23	2500	364×364×250	10

Fig.1-Forward Current Derating Curve (Per device)

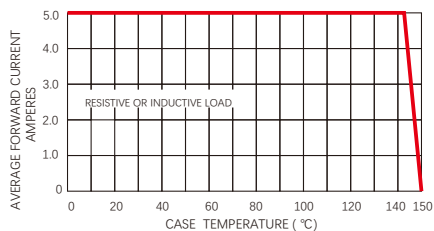


Fig.2-Maximum Non-repetitive Peak Forward Surge Current (Per device)

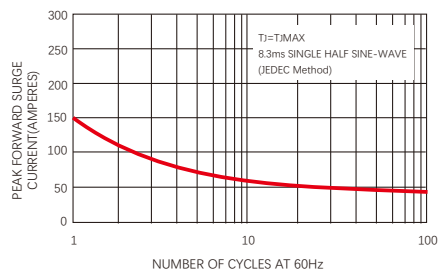


Fig.3-Typical Instantaneous Forward Characteristics (Per Leg)

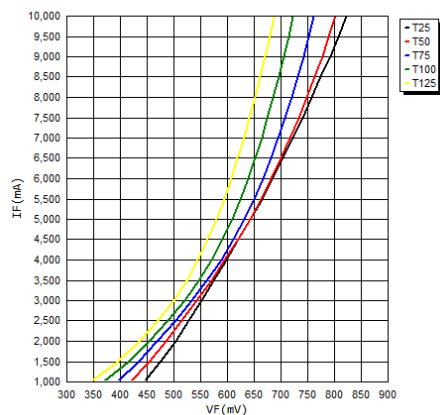


Fig.4-Typical Reverse Characteristics (Per Leg)

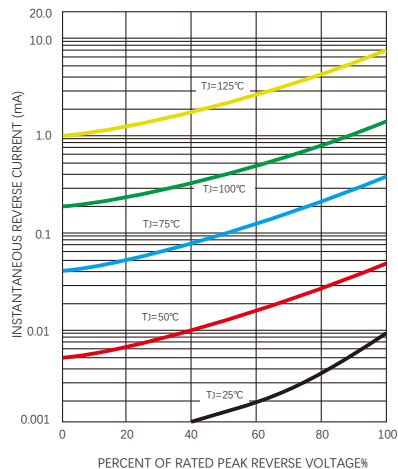
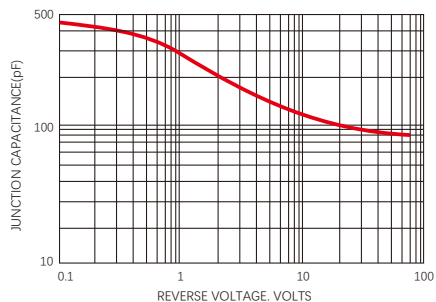
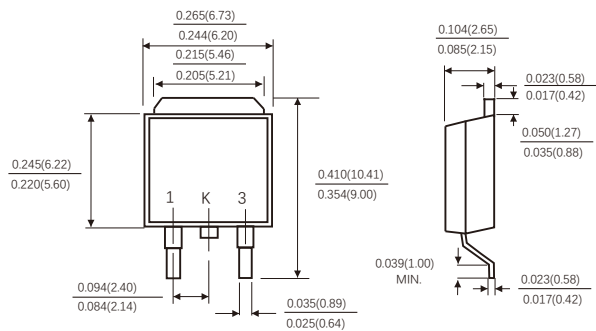


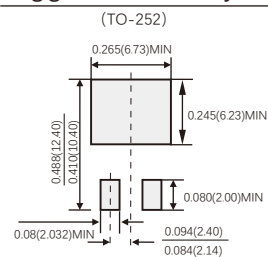
Fig.5-Typical Junction Capacitance (Per Leg)



TO-252



Suggested Pad Layout



Dimensions in inches and (millimeters)

Friendship Reminder

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