

Features

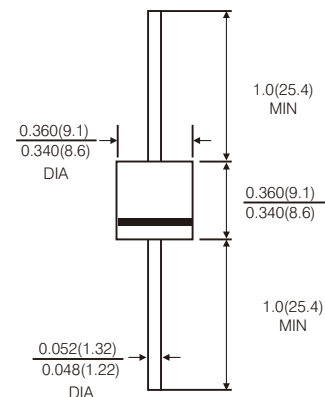
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



RoHS
COMPLIANT



R-6



Dimensions in inches and (millimeters)

Mechanical Data

- Case: R-6 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.07ounce, 2.1 grams

Typical Applications

For use in general purpose rectification of power supplies,inverters, converters and freewheeling diodes application,and polarity protection applications

PRIMARY CHARACTERISTICS	
$I_F(AV)$	15.0A
V_{RRM}	100V
I_{FSM}	250A
V_F at $I_F=15.0A, 25^\circ C$	0.76V
T_{JMAX}	150°C

MAXIMUM RATINGS

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

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_F(AV)$	15.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	250	A
Operating junction temperature range	T_j	-55 to+150	°C
Storage temperature range	T_{stg}	-55 to+150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C Unless otherwise noted)

Parameter	Test Conditions		Symbol	Typ.	Max.	Unit
Instantaneous forward voltage	T _A =25°C	I _F =15.0A	V _F ¹⁾	0.76	0.85	V
		I _F =5.0A		0.64	-	
		I _F =2.0A		0.54	-	
	T _A =125°C	I _F =15.0A		0.60	-	
		I _F =5.0A		0.50	-	
		I _F =2.0A		0.42	-	
Reverse current	T _A =25°C	V _R =100V	I _R ²⁾	0.8	5.0	μA
	T _A =100°C			-	1.0	mA
	T _A =125°C			-	5.0	
Typical junction capacitance	4V,1MHz		C _J	420		pF

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

2.Pulse test: pulse width ≤ 40ms

Thermal Characteristics

Parameter	Symbol	R-6	Unit
Typical thermal resistance ³⁾	R _{θJA}	25.0	°C/W
	R _{θJL}	2.5	

3.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

Available Pack Information

Product code	Pack	Box Size L*W*H(mm)	Quantity(pcs/box)	Carton SizeL*W*H(mm)	Quantity(box/carton)
SR15100L-R-6	B/P	190*80*21	200	433*203*230	50
SR15100L-R-6	T/B	264*74*135	1000	400*267*286	10

RATINGS AND CHARACTERISTICS OF SR15100L

FIG.1-FORWARD CURRENT DERATING CURVE

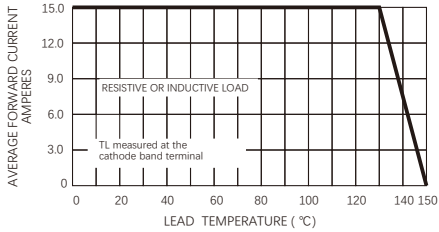


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

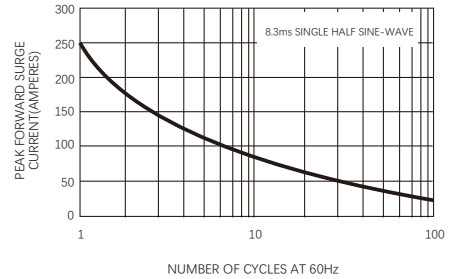


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

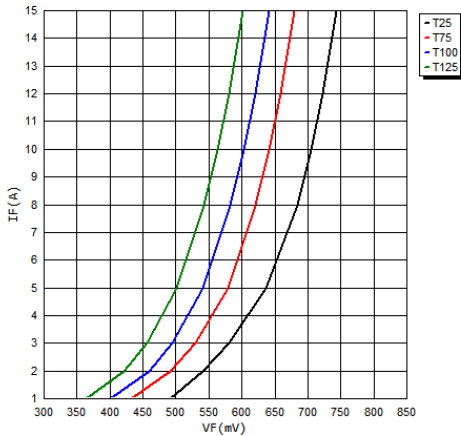


FIG.4-TYPICAL REVERSE CHARACTERISTICS

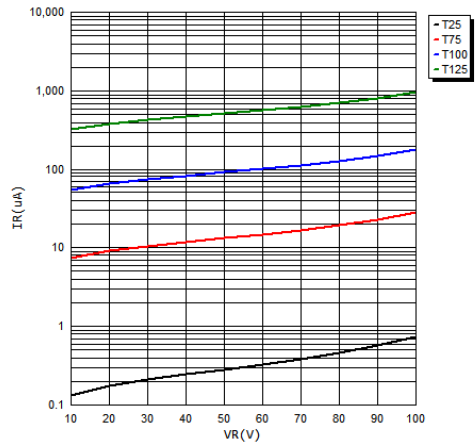
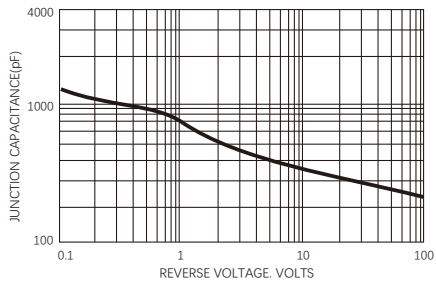


FIG.5-TYPICAL JUNCTION CAPACITANCE



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