SEMICONDUCTOR

15A6G

GENERAL PURPOSE PLASTIC RECTIFIER

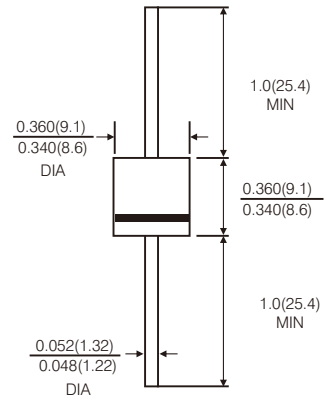
Reverse Voltage - 600 Volts
Forward Current - 15.0Amperes

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℃/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

Pb
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

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	15.0A
V_{RRM}	600V
I_{FSM}	350A
V_F at I_F=15.0A,25℃	0.92V
T_{JMAX}	150℃

Typical Applications

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

Maximum Ratings

(Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	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}	350	A
Operating junction temperature range	T_J	-55 to+150	℃
Storage temperature range	T_{stg}	-55 to+150	℃

Electrical Characteristcs (TA=25℃ Unless otherwise noted)

Parameter	Test Conditions		Symbol	Typ.	Max.	Unit
Instaneous forward voltage	TA=25℃	IF=15.0A	VF 1)	0.92	0.95	V
		IF=5.0A		0.85	-	
		IF=2.0A		0.82	-	
	TA=125℃	IF=15.0A		0.80	-	
		IF=5.0A		0.73	-	
		IF=2.0A		0.68	-	
Reverse current	TA=25℃	VR=600V	IR 2)	-	2.0	μA
	TA=75℃			-	5.0	
	TA=125℃			-	100	
Typical junction capacitance	4V,1MHz		CJ	75		pF

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

2.Pulse test: pulse width≤40ms

Thermal Characteristcs

Parameter	Symbol	15A6G	Unit
Typical thermal resistance 3)	RθJA	25.0	℃/W
	RθJL	2.5	

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

Availabale Pack Information

Product code	Pack	Box Size L*W*H(mm)	Quantity(pcs/box)	Carton SizeL*W*H(mm)	Quantity(box/carton)
15A6G-R-6	B/P	190*80*21	200	433*203*230	50
15A6G-R-6	T/B	264*74*135	1000	400*267*286	10

Fig.1-Forward Current Derating Curve

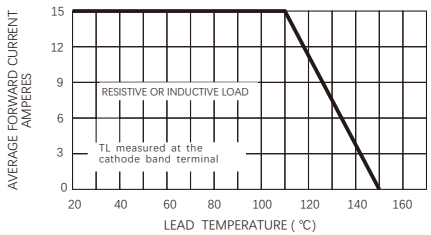


Fig.2-Maximum Non-repetitive Peak Forward Surge Current

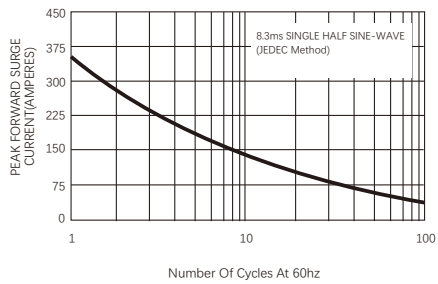


Fig.3-Typical Instantaneous Forward Characteristics

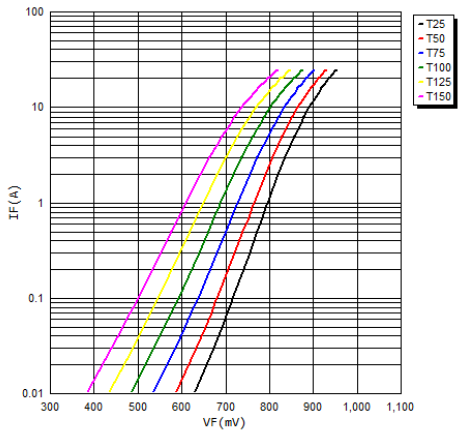


Fig.4-Typical Reverse Characteristics

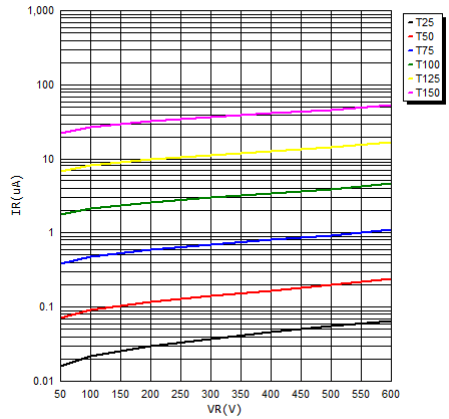
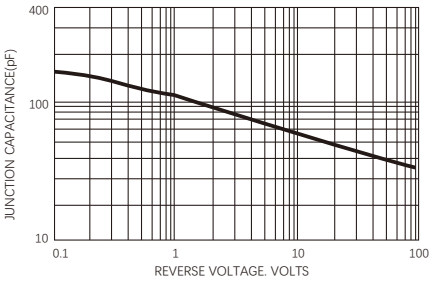


Fig.5-Typical Junction Capacitance



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