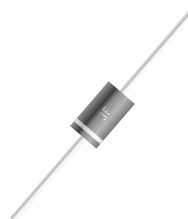
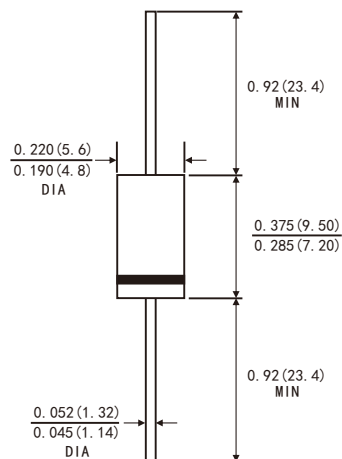


FEATURES

- 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



DO-201AD



MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041ounce, 1.15 grams

TYPICAL APPLICATIONS

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

MAXIMUM RATINGS

(Ratings at 25℃ ambient temperature unless otherwise specified)

PRIMARY CHARACTERISTICS	
$I_F(AV)$	8.0A
V_{RRM}	45V
I_{FSM}	150A
V_F at $I_F=8.0A, 25^\circ C$	0.43V
T_{JMAX}	150℃

Parameter	Symbol	SR845L	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_F(AV)$	8.0	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+150	℃
Storage temperature range	T_{stg}	-55 to+150	℃

RATINGS AND CHARACTERISTIC OF SR845L

ELECTRICAL CHARACTERISTCS (TA=25℃ Unless otherwise noted)

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instaneous forward voltage	TA=25℃	IF=2.0A	VF 1)	0.33	—	V
		IF=5.0A		0.39	—	
		IF=8.0A		0.43	0.47	
	TA=125℃	IF=2.0A		0.25	—	
		IF=5.0A		0.33	—	
		IF=8.0A		0.39	—	
Reverse current	VR=45V	TA=25℃	IR 2)	50	200	μ A
		TA=100℃		3.0	—	mA
		TA=125℃		10	—	
Typical junction capacitance	4V, 1MHz		CJ	490		pF

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

2.Pulse test: pulse width≤40ms

THERMAL CHARACTERISTCS (TA=25℃ Unless otherwise noted)

Parameter	Symbol	SR845L	Unit
Typical thermal resistance 3)	RθJA	25.0	℃/W
	RθJL	8.0	

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)
SR845L-DO-201AD	B/P	190*80*21	200	433*203*230	50
SR845L-DO-201AD	T/B	264*74*135	1000	400*267*286	10

RATINGS AND CHARACTERISTIC OF SR845L

FIG.1-FORWARD CURRENT DERATING CURVE

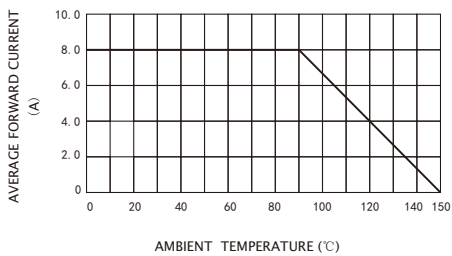


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

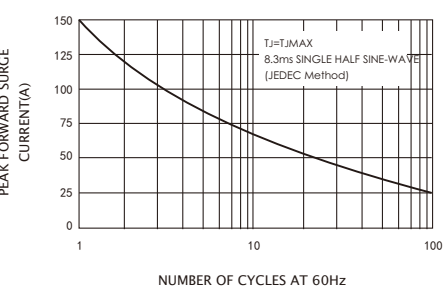


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

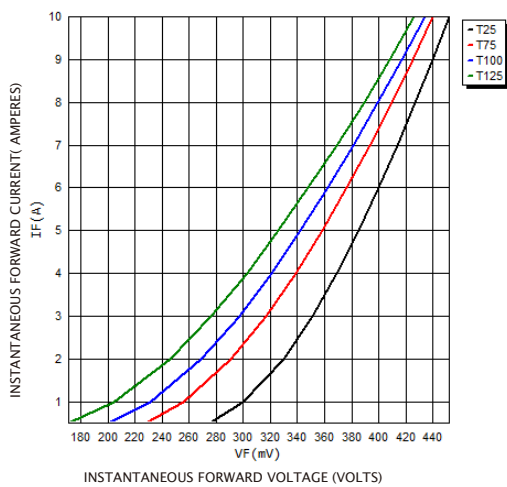


FIG.4-TYPICAL REVERSE CHARACTERISTICS

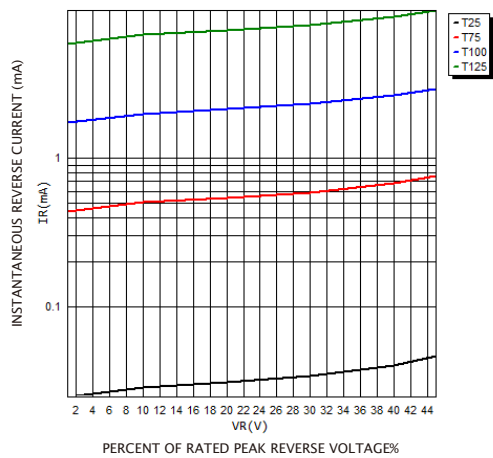


FIG.5-TYPICAL JUNCTION CAPACITANCE

