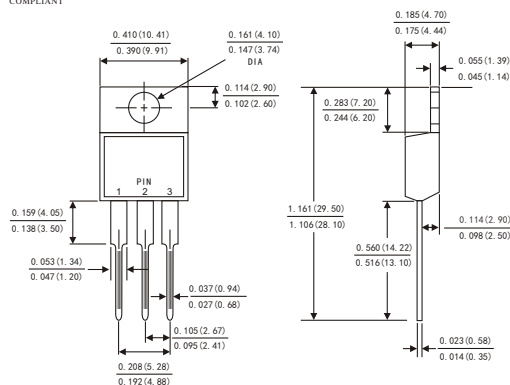


FEATURES

- 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



TO-220AB



MECHANICAL DATA

- Case: JEDEC TO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Dimensions in inches and (millimeters)

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	
$I_F(AV)$	20.0 A
V_{RRM}	200V
I_{FSM}	200A
V_F at $I_F=10.0A$ Per Leg	0.71V
T_{JMAX}	150℃

Parameter	Symbol	SR20200LCT	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	200	V
Maximum average forward rectified current (see fig.1)	Per leg	10.0 20.0	A
	Total device		
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	200	A
Operating junction temperature range	T_J	-55 to +150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

RATINGS AND CHARACTERISTIC OF SR20200LCT

ELECTRICAL CHARACTERISTCS (TA=25℃ Unless otherwise noted)

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instaneous forward voltage	Per leg IF=10.0A	TA=25℃	VF 1)	—	0.86	V
		TA=100℃		0.73	—	
		TA=125℃		0.71	—	
	Per leg IF=5.0A	TA=25℃		0.77	—	
		TA=100℃		0.66	—	
		TA=125℃		0.63	—	
Reverse current	VR=140V	TA=25℃	IR 2)	0.1	1	μA
	VR=200V	TA=25℃		2	5	μA
	VR=200V	TA=125℃		0.6	1	mA
Typical junction capacitance	4V, 1MHz		CJ	570		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	SR20200LCT	Unit
Typical thermal resistance 3)	RθJC	2.5	℃/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)
SR20200LCT-TO-220AB	P/T	558×148×38	1000	565×225×170	5

RATINGS AND CHARACTERISTIC OF SR20200LCT

FIG.1-FORWARD CURRENT DERATING CURVE

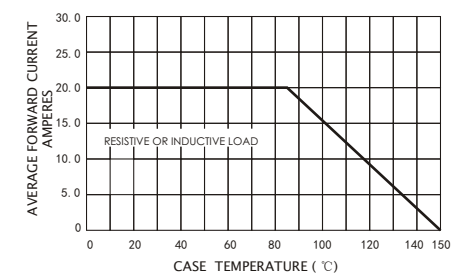


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

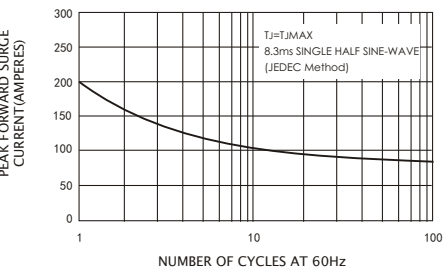


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

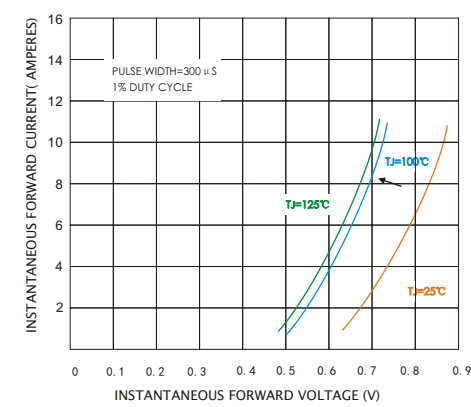


FIG.4-TYPICAL REVERSE CHARACTERISTICS

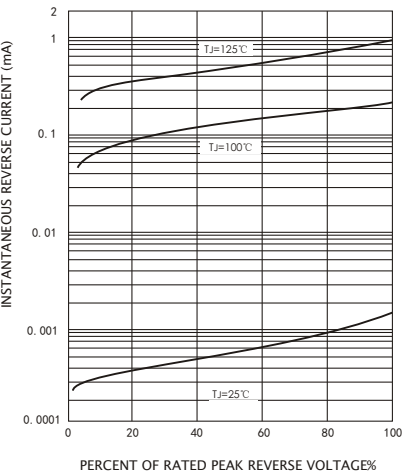


FIG.5-TYPICAL JUNCTION CAPACITANCE

