SEMICONDUCTOR

SR3040P

SCHOTTKY BARRIER RECTIFIER

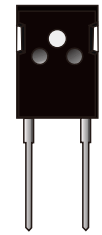
Reverse Voltage: 40Volts

Forward Current: 30.0Amperes

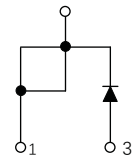
FEATURES

- 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
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Single rectifier construction
- High temperature soldering guaranteed: 260 ℃ /10 seconds, 0.25"(6.35mm)from case
- Component in accordance to 2015/863/EU

TO-247AC



Base common cathode



Cathode Anode

MECHANICAL DATA

- Case: TO-247AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked.
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwise specified)

Paramerters		Symbols	Value				Units
Maximum repetitive peak reverse voltage		V_{RRM}	40				V
Maximum RMS voltage		V_{RMS}	28				V
Maximum DC blocking voltage		V_{DC}	40				V
Maximum average forward rectified current(see Fig.1)		$I_{F(AV)}$	30.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	250				A
Forward voltage at 30A (Note 1)		V_F	TYP.	0.56	MAX.	0.62	V
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T_J=25℃	I_R	TYP.	-	MAX.	100	uA
	T_J=125℃		TYP.	-	MAX.	50	mA
Typical thermal resistance (Note 2)		$R_{\theta JC}$	1.3				°C/W
Operating junction temperature range		T_J	- 55 to+150				°C
Storage temperature range		T_{STG}	- 55 to+150				°C

Notes: 1.Pulse test: 300 us pulse width,1% duty cycle
2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC OF SR3040P

FIG.1-FORWARD CURRENT DERATING CURVE

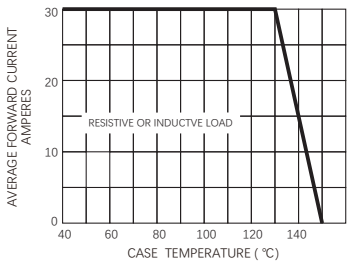


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

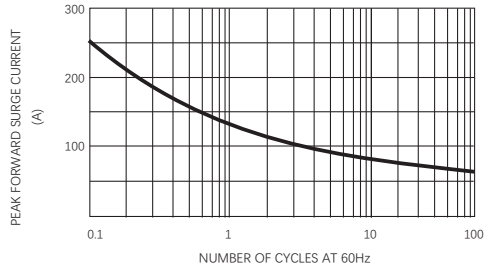


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

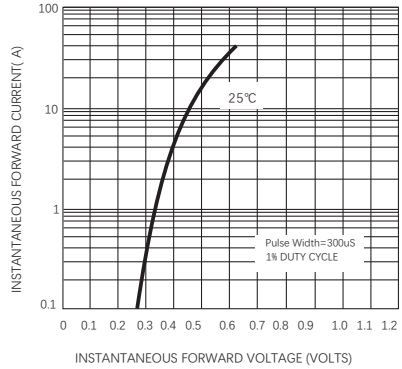
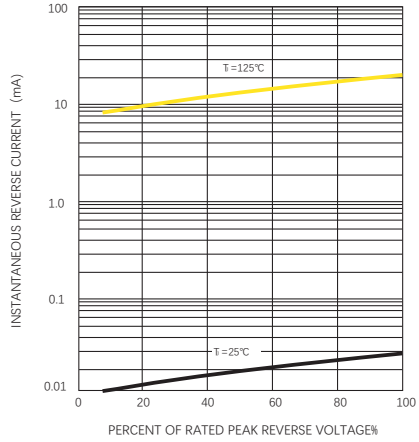
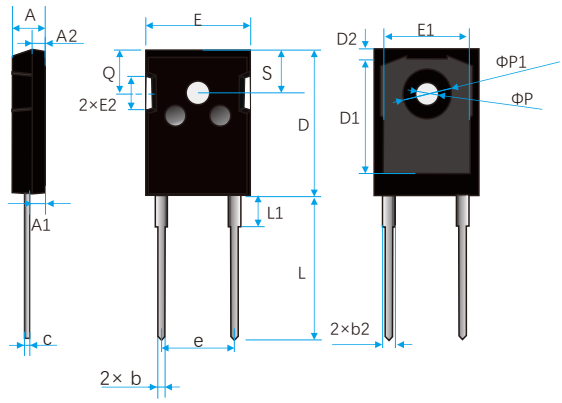


FIG.4-TYPICAL REVERSE CHARACTERISTICS



TO-247AC



Symbol	millimeter		
	Min.	Typ.	MAX
A	4.70		5.30
A1	2.21		2.59
A2	1.50		2.49
D	20.30		21.30
E	15.48		16.24
E2	4.30		5.50
e		10.92	
L	19.80		20.30
L1	4.00		4.60
ΦP		3.50	
Q	5.38		6.19
S		6.14	
b	0.99		1.40
b2	1.65		2.39
b4	2.59		3.43
c	0.38		0.89
D1	13.07		
D2	0.51		1.35
E1	13.06		
ΦP1		7.20	

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