

# SR6045LPT

# Low VF SCHOTTKY BARRIER RECTIFIER

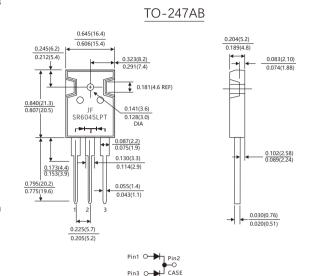
Reverse Voltage: 45Volts Forward Current: 60.0Amperes

### 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
- Dual rectifier construction
- High temperature soldering guaranteed :260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to 2015/863/EU

### MECHANICAL DATA

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



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Paramerters		Symbols	Value				Units
Maximum repetitive peak reverse voltage		Vrrm	45				V
Maximum RMS voltage		Vrms	32				V
Maximum DC blocking voltage		Vdc	45				V
Maximum average forward Per leg   rectified current(see Fig.1) Total device		IF(AV)	30.0 60.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load, (JEDEC method Total device)		IFSM	300				A
Forward voltage at 30A per leg (Note 1)		VF	TYP.	0.54	MAX.	0.60	v
Maximum instantaneous reverse current at rated DC blocking Per Leg voltage(Note 1)	TJ=25℃	. IR	TYP.	-	MAX.	100	uA
	TJ=125℃		TYP.	-	MAX.	50	mA
Typical thermal resistance (Note 2)		Rejc	0.50				°C/W
Operating junction temperature range		ΤJ	-55 to+150				°C
Storage temperature range		Tstg	-55 to+150				°C

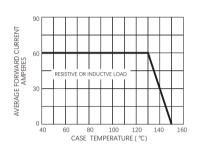
Notes: 1.Pulse test: 300 us pulse width,1% duty cycle

2.Thermal resistance from junction to case, Total device

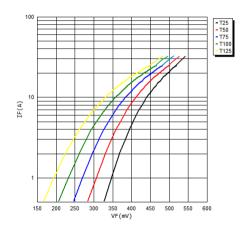


## RATINGS AND CHARACTERISTICS OF SR6045LPT

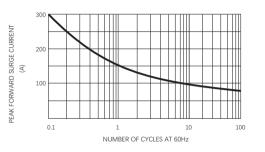
#### FIG.1-FORWARD CURRENT DERATING CURVE



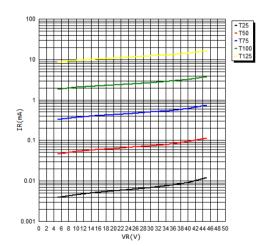




#### FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS





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