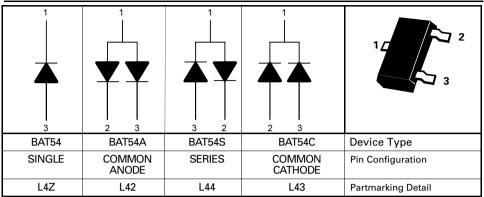
# SOT23 SILICON EPITAXIAL SCHOTTKY BARRIER DIODES

**BAT54 SERIES** 

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**FEATURES**: Low V<sub>F</sub> & High Current Capability **APPLICATIONS**: PSU, Mobile Telecomms & SCSI

#### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V <sub>R</sub>	30	V
Forward Current	I <sub>F</sub>	200	mA
Forward Voltage @ I <sub>F</sub> =10mA	V <sub>F</sub>	400	mV
Repetitive Peak Forward Current	I <sub>FRM</sub>	300	mA
Non Repetitive Forward Current t<1s	I <sub>FSM</sub>	600	mA
Power Dissipation at T <sub>amb</sub> =25°C	P <sub>tot</sub>	330	mW
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C
JunctionTemperature ¤	T <sub>j</sub>	125	°C

### ELECTRICAL CHARACTERISTICS (at T<sub>amb</sub> = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	30	50		V	$I_R=10\mu A$
Forward Voltage	V <sub>F</sub>		135 200 280 350 530	240 320 400 500 1000	mV mV mV mV	<sub>F</sub> =0.1mA   <sub>F</sub> =1mA   <sub>F</sub> =10mA   <sub>F</sub> =30mA   <sub>F</sub> =100mA
Reverse Current	I <sub>R</sub>		2.5	4	μΑ	V <sub>R</sub> =25V
Diode Capacitance	C <sub>D</sub>		7.5	10	pF	f=1MHz,V <sub>R</sub> =1V
Reverse Recover Time	t <sub>rr</sub>			5	ns	switched from $\rm I_{F}{=}10mA$ to $\rm I_{R}{=}10mA$ $\rm R_{L}{=}100\Omega,$ Measured at $\rm I_{R}{=}1mA$

<sup>&</sup>lt;sup>∞</sup> Dual Device; For simultaneous continuous use T<sub>i</sub>=100°C.

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### TYPICAL CHARACTERISTICS

