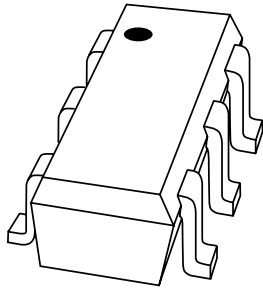


DATA SHEET



BAT754L Schottky barrier triple diode

Product data sheet

2001 Jan 18

Schottky barrier triple diode

BAT754L

FEATURES

- Very low forward voltage
- Guard ring protected
- Low diode capacitance
- Three independent diodes in a small plastic SMD package.

APPLICATIONS

- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- Blocking diodes
- Low power consumption applications (e.g. hand-held applications).

DESCRIPTION

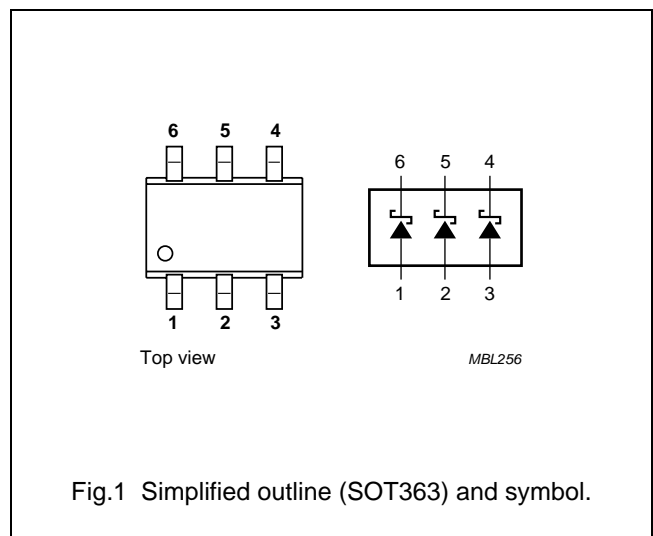
Three internal (galvanic) isolated silicon epitaxial Schottky barrier diodes in a SOT363 small SMD plastic package.

MARKING

TYPE NUMBER	MARKING CODE
BAT754L	L1

PINNING

PIN	DESCRIPTION
1	anode 1
2	anode 2
3	anode 3
4	cathode 3
5	cathode 2
6	cathode 1



LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 60134).

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
Per diode					
V_R	continuous reverse voltage		–	30	V
I_F	continuous forward current		–	200	mA
I_{FRM}	repetitive peak forward current	$t_p < 1\text{ s}; \delta < 0.5$	–	300	mA
I_{FSM}	non-repetitive peak forward current	$t_p < 10\text{ ms}$	–	600	mA
T_{stg}	storage temperature		–65	+150	°C
T_j	junction temperature		–	125	°C
T_{amb}	operating ambient temperature		–65	+125	°C

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th\ j-a}$	thermal resistance from junction to ambient	note 1	416	K/W

Note

1. Refer to SOT363 standard mounting conditions.

ELECTRICAL CHARACTERISTICS

$T_{amb} = 25\text{ °C}$; unless otherwise specified.

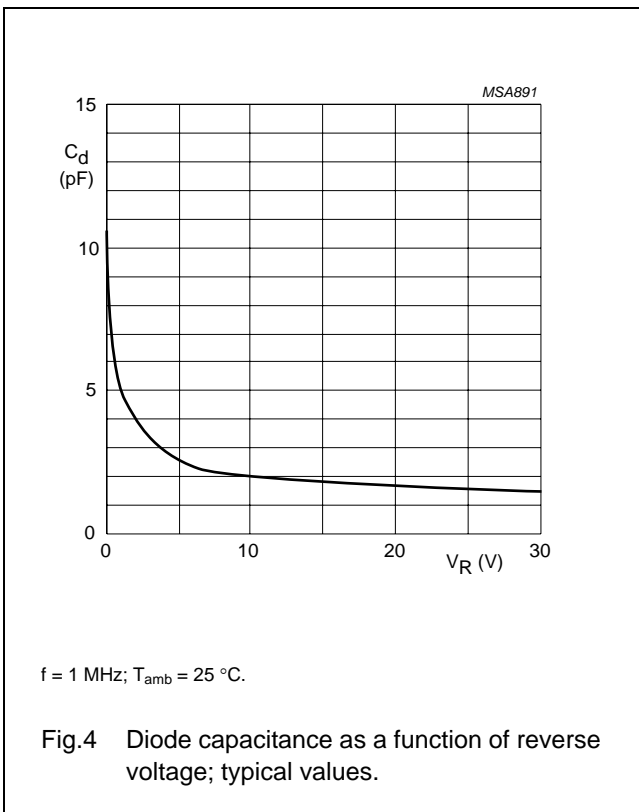
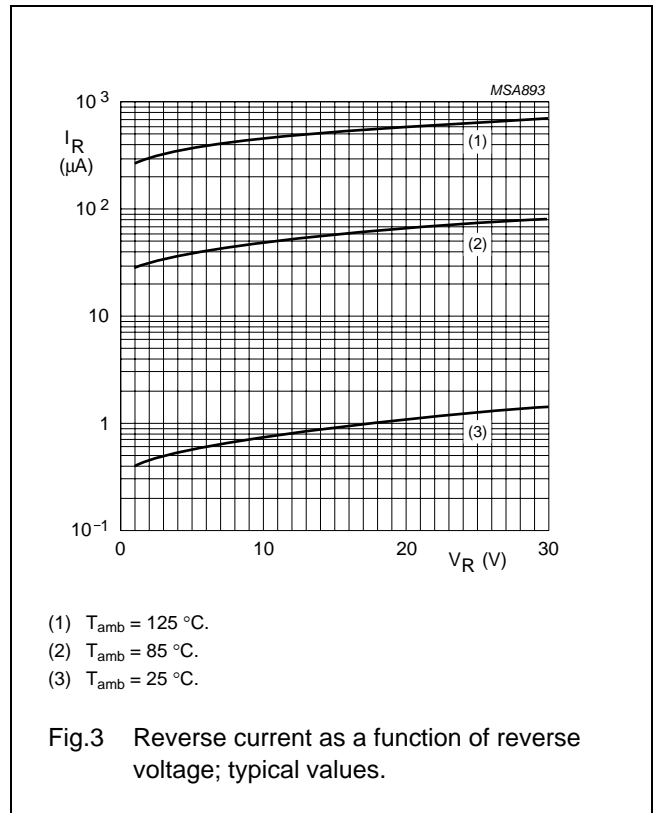
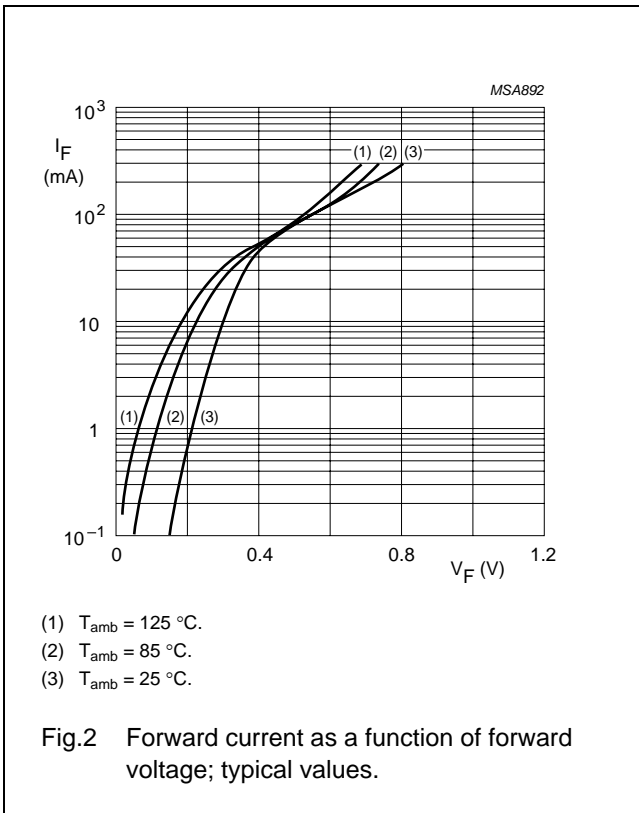
SYMBOL	PARAMETER	CONDITIONS	MAX.	UNIT
Per diode				
V_F	forward voltage	note 1; see Fig.2		
		$I_F = 0.1\text{ mA}$	200	mV
		$I_F = 1\text{ mA}$	260	mV
		$I_F = 10\text{ mA}$	340	mV
		$I_F = 30\text{ mA}$	420	mV
		$I_F = 100\text{ mA}$	750	mV
I_R	reverse current	$V_R = 25\text{ V}$; note 1; see Fig.3	2	μA
C_d	diode capacitance	$V_R = 1\text{ V}$; $f = 1\text{ MHz}$; see Fig.4	10	pF

Note

1. Pulse test: pulse width = $300\ \mu\text{s}$; $\delta = 0.02$.

Schottky barrier triple diode

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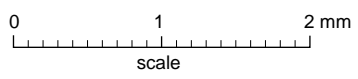
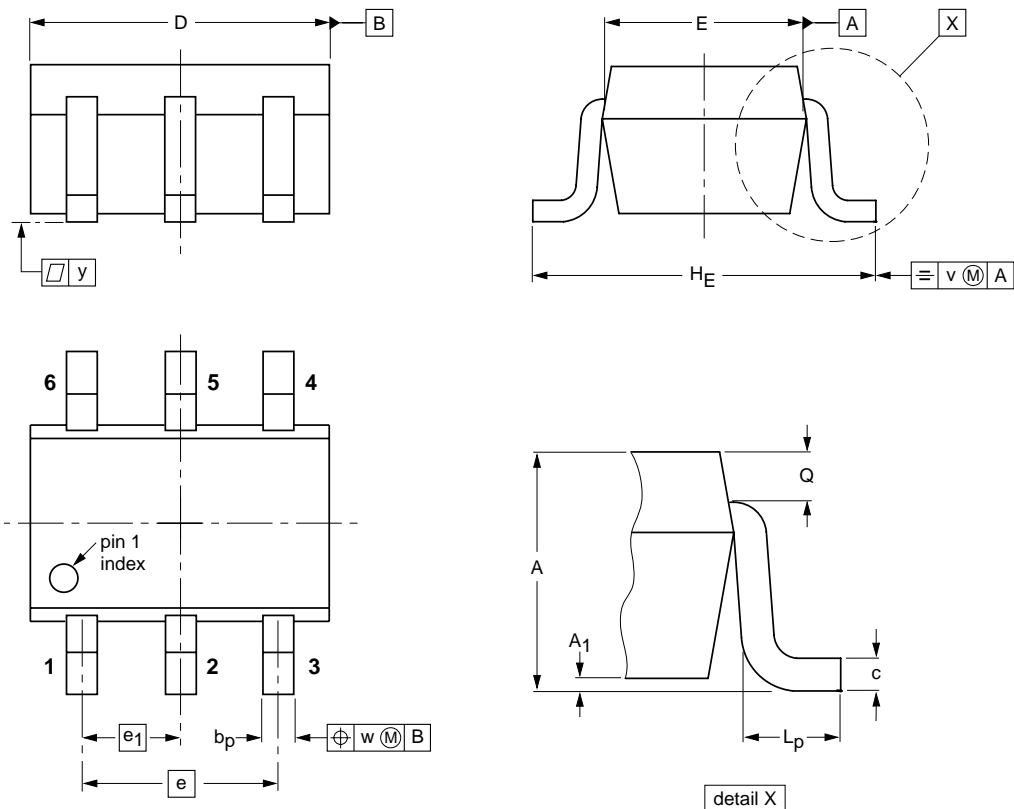
Schottky barrier triple diode

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PACKAGE OUTLINE

Plastic surface mounted package; 6 leads

SOT363



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

OUTLINE VERSION	REFERENCES				EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ			
SOT363			SC-88			97-02-28

Schottky barrier triple diode

BAT754L

DATA SHEET STATUS

DOCUMENT STATUS ⁽¹⁾	PRODUCT STATUS ⁽²⁾	DEFINITION
Objective data sheet	Development	This document contains data from the objective specification for product development.
Preliminary data sheet	Qualification	This document contains data from the preliminary specification.
Product data sheet	Production	This document contains the product specification.

Notes

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