

# SOD123F

## New flat-lead package portfolio

### Key features

- Flat-lead package SOD123F
- 2.6 x 1.7 mm body size
- Foot print comparable with SOD123 gull wing
- 830 mW power dissipation

### Portfolio overview

- MEGA Schottky rectifier: replacing traditional rectifiers with smaller solutions
- General purpose Schottky and Switching diodes
- Zener diodes: higher thermal performance



2.6 x 1.7 x 1.1 mm

### Low $V_F$ (MEGA) Schottky barrier rectifier

$V_R$ (V)	$I_F$ max. (A)	$I_{FSM}$ (A)	$V_F$ max. (mV)	$I_R$ max. (mA) @	$V_R$ (V)	Type number
10	2.0	9	460	3.0	10	PMEG1020EH
	3.0	9	530	3.0	10	PMEG1030EH
20	0.5	9	390	0.2	20	PMEG2005EH
	1.0	9	430	0.2	20	PMEG2010AEH
	1.0	9	500	0.2	20	PMEG2010EH
	1.5	9	660	0.2	20	PMEG2015EH
	2.0	9	525	0.2	20	PMEG2020EH
30	0.5	9	430	0.15	30	PMEG3005EH
	1.0	9	560	0.15	30	PMEG3010EH
	1.5	9	550	1.0	30	PMEG3015EH
	2.0	9	620	1.0	30	PMEG3020EH
40	0.5	9	470	0.1	40	PMEG4005EH
	1.0	9	640	0.1	40	PMEG4010EH

### General purpose Switching diodes

$V_R$ (V)	$I_F$ (mA)	$I_{FRM}$ (mA)	$V_F$ (mV)	$I_R$ ( $\mu$ A) @	$V_R$ (V)	$T_{RR}$ (ns)	Type number
75	215	500	1000	5	75	3000	BAS116H
100	215	500	1000	1000	75	4	BAS16H
200	200	625	1000	100	200	50	BAS21H

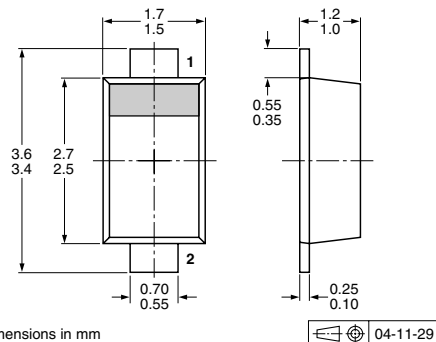
### General purpose Schottky barrier diodes

$V_R$ (V)	$I_F$ (mA)	$V_F$ (mV) @ $I_F$ (mA)	$I_R$ (nA) @	$V_R$ (V)	$C_D$ (pF)	Type number	
40	120	1000	40	10	40	5	BAS40H
70	70	1000	15	10	70	2	BAS70H
30	200	800	100	2	25	10	BAT54H

### Zener diodes

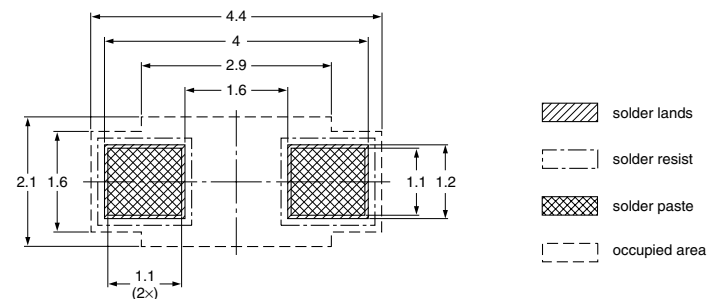
$V_z$ (nom.) (V)	Tolerance (%)	$I_F$ (mA)	$P_{tot}$ (mW)	$P_{ZSM}$ (W)	Type number
2.4 - 75	5	250	830	40	BZT52H-series

### Package dimensions



Dimensions in mm

### Foot print



all dimensions in mm

## SOD323F (SC-90)

### New flat-lead package portfolio

#### Key features

- Flat-lead package SOD323F (SC-90)
- 1.7 x 1.25 mm body size
- Low body height of 0.7 mm
- Foot print comparable with SOD323 gull wing
- 830 mW power dissipation

#### Portfolio overview

- MEGA Schottky rectifier: replacing traditional rectifiers with smaller solutions

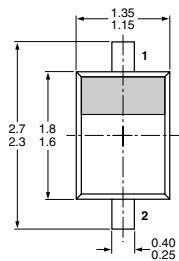


1.7 x 1.25 x 0.7 mm

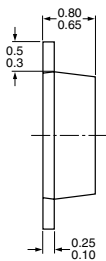
#### Low $V_F$ (MEGA) Schottky barrier rectifier

$V_R$ (V)	$I_F$ max. (A)	$I_{FSM}$ (A)	$V_F$ max. (mV) @ $I_F$ max. (A)	$I_R$ max. (mA) @ $V_R$ (V)	Type number
10	2.0	9	460	3.0	PMEG1020EJ
	3.0	9	530	3.0	PMEG1030EJ
20	0.5	9	390	0.2	PMEG2005EJ
	1.0	9	550	0.07	PMEG2010AEJ
	1.0	9	500	0.2	PMEG2010EJ
	1.5	9	660	0.07	PMEG2015EJ
	2.0	9	525	0.2	PMEG2020EJ
30	0.5	9	430	0.15	PMEG3005EJ
	1.0	9	560	0.15	PMEG3010EJ
	1.5	9	550	1.0	PMEG3015EJ
	2.0	9	620	1.0	PMEG3020EJ
40	0.5	9	470	0.1	PMEG4005EJ
	1.0	9	640	0.1	PMEG4010EJ

#### Package dimensions

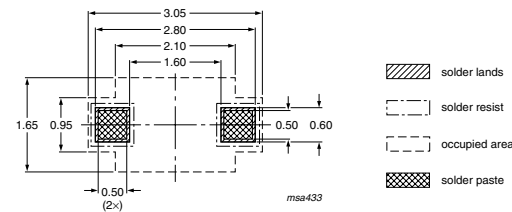


Dimensions in mm



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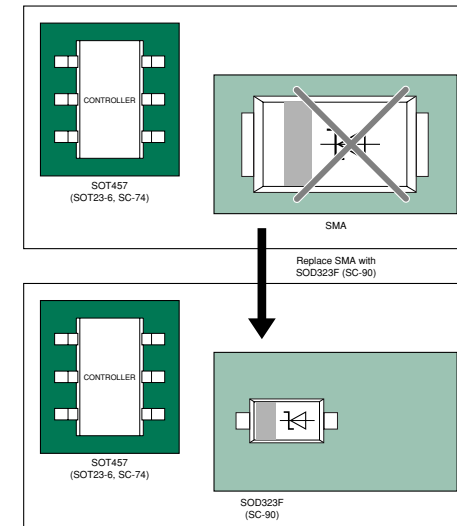
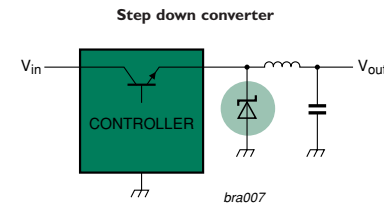
#### Foot print



Dimensions in mm

- solder lands
- solder resist
- occupied area
- solder paste

#### Application example



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