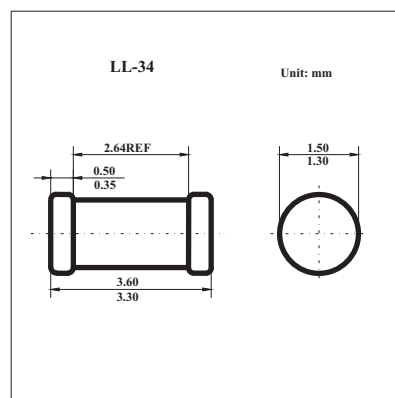


## Band-switching diodes

## BA682; BA683

## ■ Features

- Continuous reverse voltage: max. 35 V
- Continuous forward current: max. 100 mA
- Low diode capacitance: max. 1.5 pF
- Low diode forward resistance: max. 0.7 to 1.2  $\Omega$

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Min	Max	Unit
Continuous reverse voltage	$V_R$			35	V
Continuous forward current	$I_F$	single diode loaded		100	mA
Storage temperature	$T_{stg}$		-65	+150	$^\circ\text{C}$
Junction temperature	$T_j$			150	$^\circ\text{C}$
Thermal resistance from junction to tie-point	$R_{th\ j-t\ p}$			300	K/W
Thermal resistance from junction to ambient	$R_{th\ j-a}$			600	K/W

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Max	Unit
Forward voltage	$V_F$	$I_F = 100\text{ mA}$	1.0	V
Reverse current	$I_R$	$V_R = 20\text{ V}$	50	nA
		$V_R = 20\text{ V}; T_j = 75\text{ }^\circ\text{C}$	1	$\mu\text{ A}$
Diode capacitance	$C_d$	$f = 1\text{ MHz}; V_R = 1\text{ V}$	1.5	pF
Diode capacitance	$C_d$	$f = 1\text{ MHz}; V_R = 3\text{ V}$	1.25	pF
			1.20	
Diode forward resistance	$r_D$	$I_F = 3\text{ mA}; f = 200\text{ MHz};$	0.7	$\Omega$
			1.2	
Diode forward resistance	$r_D$	$I_F = 10\text{ mA}; f = 200\text{ MHz};$	0.5	$\Omega$
			0.9	