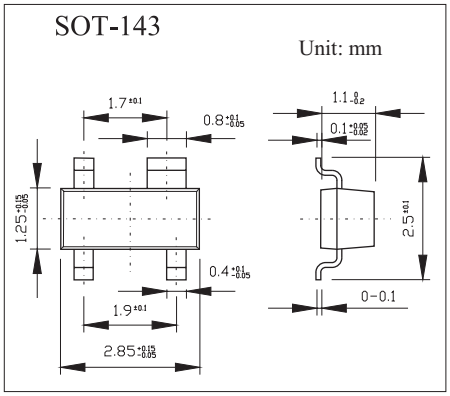
Silicon PIN Diodes

BAR60;BAR61



Features

- RF switch
- RF attenuator for frequencies above 10 MHz

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Value	Unit
Reverse voltage	V_R	100	V
Forward current	I_F	140	mA
Total power dissipation, Ts ≤ 65℃ (Note 1)	P_{tot}	250	mW
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-55 to +150	℃
Operating temperature range	T_{op}	-55 to +150	℃
Junction - ambient[1)]	$R_{th\ JA}$	≤ 580	K/W
Junction - soldering point	$R_{th\ JS}$	≤ 340	K/W

Note

1.Unit Rating.Total Rating = Unit Rating × 1.5

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	V_R = 50 V			100	nA
		V_R = 100 V			1	μA
Forward voltage	V_F	I_F = 100 mA			1.25	V
Diode capacitance	C_T	V_R = 50 V, f = 1 MHz		0.25	0.5	pF
		V_R = 0, f = 100 MHz		0.2		
Zero bias conductance	g_p	V_R=0 V,f=100 MHz		50		μS
Charge carrier life time	τ_L	I_F = 10 mA, I_R = 6 mA		1		μS
Differential forward resistance	rf	f = 100 MHz, I_F = 0.01 mA		2800		Ω
		I_F = 0.1 mA		380		
		I_F = 1.0 mA		45		
		I_F = 10 mA		7		

Marking

Type	BAR60	BAR61
Marking	60	61