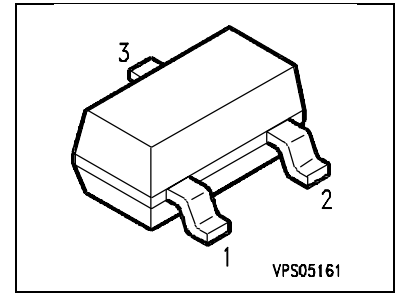


Silicon PIN Diode Array

- Surge protection device
- Two PIN diodes, series configuration
- Designed for surge overvoltage clamping in antiparallel connection



Type	Marking	Ordering Code (taped)	Pin Configuration			Package 1)
			1	2	3	
BAR66	PMs	Q62702-A1473	A1	C2	C1/A2	SOT-23

Maximum Ratings

Parameter	Symbol	BAR66	Unit
Reverse voltage	V_R	150	V
Forward current	I_F	200	mA
Forward current ($t_p = 1\mu\text{S}$)	I_F	20	A
Power dissipation $T_S \leq 25^\circ\text{C}$ 1)	P_{tot}	250	mW
Operating temperature range	T_{op}	-55...+150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55...+150	$^\circ\text{C}$

Thermal Resistance

Junction-ambient 1)	$R_{\text{th JA}}$	≤ 450	K/W
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1) Package mounted on alumina 15mm x 16.7mm x 0.7mm

Characteristics per Diode

at $T_A = 25\text{ °C}$, unless otherwise specified.

Parameter	Symbol	Value			Unit
		min.	typ.	max.	
Reverse current $I_R = 5\text{ }\mu\text{A}$	V_R	150	-	-	V
Forward voltage $I_F = 50\text{ mA}$	V_F	-	0.95	1.2	V
Diode capacitance $V_R = 35\text{ V}, f = 1\text{ MHz}$ $V_R = 0\text{ V}, f = 100\text{ MHz}$	C_T	-	0.4 0.35	0.6 -	pF
Forward resistance $I_F = 10\text{ mA}, f = 100\text{ MHz}$	r_f	-	1.5	-	Ω
Charge carrier lifetime $I_F = 10\text{ mA}, I_R = 6\text{ mA}, I_R = 3\text{ mA}$	τ_L	-	0.7	-	μs
Series inductance	L_S	-	2	-	nH

Diode capacitance $C_T = f(V_R)$
 $f = 1\text{ MHz}$

