BP Radiation sensitive devices

Dispositifs sensibles aux radiations - Strahlungsempfindliche Elemente

TYPE NUMBER	*D E S C R I P T I O N* Additional information	SUBTYPES (2)	RATINGS AND CHARACTERISTICS (*at Tamb = 25°C, unless otherwise stated*)				
			Symbol	Value	Unity	min typ max	MEASURING CONDITIONS
BPX52 BPX53 BPX54 BPX55	*DIFFUSED NUCLEAR RADIATION DETECTORS WITH PLANAR TECHNOLOGY, ENCAPSULATED IN SPECIAL BOXES WITH THREE ELECTRICAL OUTPUT CONNECTORS* A = 10 mm^2, R_α = 20 keV (°) (BPX52) A = 25 mm^2, R_α = 20 keV (°) (BPX53) A = 100 mm^2, R_α = 25 keV (°) (BPX54) A = 200 mm^2, R_α = 25 keV (°) (BPX55) (°) Resolution (R) obtained with α of ^{241}Am	BPX52- 50	h_{dep}	50	µm		
		-100	h_{dep}	100	µm		
		-200	h_{dep}	200	µm		
		BPX53- 50	h_{dep}	50	µm		
		-100	h_{dep}	100	µm		
		-200	h_{dep}	200	µm		
		BPX54- 50	h_{dep}	50	µm		
		-100	h_{dep}	100	µm		
		-200	h_{dep}	200	µm		
		BPX55- 50	h_{dep}	50	µm		
		-100	h_{dep}	100	µm		
		-200	h_{dep}	200	µm		
BPX56 BPX57	*DETECTORS INTENDED FOR HIGH RESOLUTION X-RAY SPECTROMETRY.* *Delivered in a cryostat, provided with a pre-amplifier with cooled first stage* Active area : 25 mm^2 (BPX56) 100 mm^2 (BPX57) Depletion depth : 3 to 5 mm	BPX56SQ	R_X	250	eV		at ^{55}keV radiation (5,898 keV)
		BPX56A	R_X	300	eV		at ^{55}keV radiation (5,898 keV)
		BPX57SQ	R_X	350	eV		at ^{55}keV radiation (5,898 keV)
		BPX57A	R_X	400	eV		at ^{55}keV radiation (5,898 keV)
BPX58	*PHOTO-TRANSISTOR LINE CONTAINING 10 NPN TRANSISTORS FOR READOUT ARRAYS* *Outlines : NS248* E with colour temperature of 2856 °K		V_{CE}	20	V	max	
			I_C	50	mA	max	
			P_{tot}	50	mW	max	single transistor
				200	mW	max	transistor line
			T_j	65	°C	max	
			I_C	200	nA	max	at V_{CE} = 5 V ; E = 0
				80	µA	min	at V_{CE} = 5 V ; E = 1000 lx
			λ_{pk}	0,78	µm	typ	
BPX60 BPX61	*Si PHOTO TRANSISTOR in microceramic encapsulation.* *Outlines :* 112		V_R	32	V	max	
			T_L	230	°C	max	
			P_{tot}	325	mW	max	
			V_L	360	mV	max	at 100 lx
			I_k	5	µA	max	at 100 lx
			λ_s	850	nm	max	at 100 lx
			t_r	1	µs		at R_L = 1 kΩ ; V_R = 10V
			T_K	-2,6	mV/K		for V_L
			T_K	0,2	%/K		for I_K
			A	7,6	mm^2		
			I_R	7	nA		
BPX62	*NPN PHOTO-TRANSISTOR* *Outlines : NS249* I_{ph} (at V_{CE} = 5 V ; E = 1000 lx) Group I : 0,4 - 0,8 mA II : 0,63 - 1,25 mA III : 1,0 - 2,0 mA IV : 1,6 - 3,2 mA E with colour temperature of 2856 °K		V_{CEO}	32	V	max	
			V_{EB}	5	V	max	
			P_{tot}	50	mW	max	
			T_j	125	°C	max	
			I_{CE}	100	nA	max	at V_{CE} = 25 V ; E = 0
			λ_{pk}	0,78	µm		

(1) **FWHM : Full width, half maximum of pulse**

(2) **if applicable**