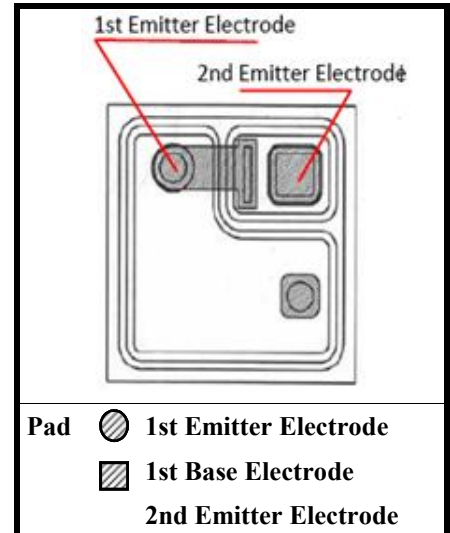


●Features

- Silicon NPN Darlington Connected Photo Transistor

●Appearance of Wafer

ITEM		SPECIFICATION
Wafer Size		5inch (Φ125±0.5mm)
Wafer Thickness		280±10μm
Die Size		0.65mm × 0.65mm
Dicing Line		60μm
Metallization	Top	Al
	Bottom	Cr-Au
Passivation		Silicon Nitride
Pad Size	Base	1st : 100μm × 100μm
	Emitter	1st : Φ100μm 2nd : 130μm × 130μm
Reject Ink Dot Size		>80μm

●Die Outline

●Absolute Maximum Ratings (Ta = 25 °C)

Parameter	Symbol	Maximun rating	Unit
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Collector Voltage	V_{ECO}	4.5	V
Junction Temperature	T_J	150	°C

●Electrical Characteristics (Ta = 25 °C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Spectrum Sensitivity	λ		450 ~ 1,050			nm
Peak Sensing Wavelength	λ_p			910		nm

●Guaranteed Probed Electrical Characteristics (Ta = 25 °C)

Parameter	Symbol	Test Condition	Min	Max	Unit
B-E Voltage	BV_{BEF}	$I_{BE}=10\mu A$		0.8	V
C-E Voltage	BV_{CEO}	$I_{CE}=500\mu A$	45		V
E-C Voltage	BV_{ECO}	$I_{EC}=50\mu A$	6.5		V
C-E Leakage Current	I_{CEO}	$V_{CE}=45V$		500	uA
C-E Saturation Voltage	V_{CES}	$I_C=5mA, I_B=1mA$		300	mV
DC Current Gain 1	h_{FE1}	$V_{CE}=10V, I_C=10mA$	240	280	-
DC Current Gain 2	h_{FE1}	$V_{CE}=10V, I_C=10mA$	240		-
HFE1*HEF2	HFE	DC GAIN1* DC GRAN2	50K	85K	-

Note :(1) Due to probe testing Limitations, DC parameters only are tested.

(2) h_{FE} Rank : 50K~85K