Photointerrupter (Reflective) ST279

ST279

● Features

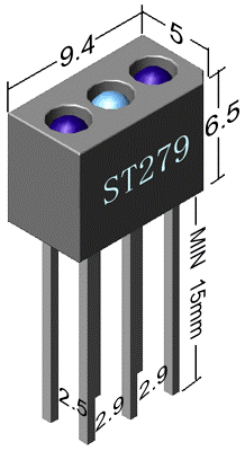
- Combines two pairs of high output GaAs IREDs with high sensitive phototransistors.
- Moving direction can be detected.
- Wide detecting range, minimum range is 2mm.
- Non-contact detecting manner

● Applications

- IC card electric power meter.
- AMR system.
- Water meter.
- OA equipment: facsimile, printer, copier etc.
- Combined with direction detector IC(ST288A), it can be used as detecting direction of motion, speed of clockwise/ counterclockwise rotation and moving distance etc.

●Dimensions Uint:mm

Unless othewise specified, the tolerances are ±0.2mm



●Absolute Maximum Ratings(Ta=25℃)

Parameter		Symbol	Rating	Unit
Input	Forward Current	I_F	50	mV
	Reverse Voltage	V_R	6	V
	Power Dissipation	P	75	mW
Output	Collector-Emitter Voltage	V_{CEO}	25	V
	Emitter-Collector Voltage	V_{ECO}	6	V
	Collector Power Dissipation	P_C	50	mW
*Operating Temperature		T_{opr}	-20～65	℃
Storage Ttemperature		T_{stg}	-30～75	℃
** Soldering Temperature		T_{sol}	260	℃

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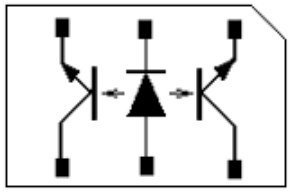

*The special requirement could be met according to customer's request.

**Soldering time: 5s max. Soldering position: at least 1.5mm from the base of the package.

● Electro-Optical Characteristics(Ta=25℃)

Parameter			Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage		V_F	I_F=20mA	-	1.25	1.5	V
	Reverse Current		I_R	V_R=3V	-	-	10	μA
Output	Collector Dark Current		I_{CEO}	V_{CE}=20V	-	-	1	μA
	Collector Light Current		I_{L1}, I_{L2}	V_{CE}=5V I_F=8mA	0.3	-	-	mA
	Collector Current Ratio		Ic1/ Ic2	V_{CE}=15V I_F=8mA	0.71	-	1.4	
	Collector-Emitter Saturation Voltage		$V_{CE(SAT)}$	I_F=8mA Ic=0.15mA	-	-	0.4	V
Transfer Character -istics	Response Time	Rise Time	Tr	I_F=20mA V_{CE}=5V R_C=100	-	10	-	μS
		Fall Time	Tf			10		μS

Notes: Collector light current I_L, Collector-emitter saturation voltage $V_{CE(SAT)}$, Relative current , Response time is measured within 2~5mm between photointerrupter's top and reflecting surface. The value is affected by the smooth of light reflecting surface.

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