## **OPTOELECTRONIC DEVICES**



## Light Emitting Diodes (cont.)

**Remote Control** 

Part Number					m Ratings	Typical Characteristics (Ta = 25°C)					
				T <sub>a</sub> = 25°(		V <sub>F</sub> TYP. (V)	I <sub>R</sub> TYP. (μΑ)	λ <sub>p</sub> TYP. (nm)			
	Material	Features	Pd (mW) I <sub>F</sub> (mA)		T <sub>stg</sub> (°C)	(I <sub>F</sub> ≃30 mA)	(V <sub>R</sub> =3 V)	(I <sub>F</sub> =30 mA)	(I <sub>F</sub> =30 mÅ)		
SE301A	GaAs	High output High reliability	150	100	-65 to +125	1.2 (I <sub>F</sub> =50 mA)	0.01	940 (I <sub>F</sub> ≕50 mA)	6 (I <sub>F</sub> =50 mA)		
SE302A	GaAs	Mini size	75	50	-30 to +80	1.2	0.01	940	1.5		
SE303A-C	GaAs	High output Wide radiation angle	150	100	-40 to +100	1.25 (I <sub>F</sub> =50 mA)	0.01 (V <sub>R</sub> =5 V)	940 (I <sub>F</sub> =50 mA)	8 (I <sub>F</sub> =50 mA)		
SE304	GaAs	Lateral direction output	100	50	-40 to +100	1.2	0.01	940	1.5		
SE306	GaAs	Lateral direction output with a lens	100	. 50	-40 to +100	1.1 (I <sub>F</sub> =10 mA)	0.01	940 (I <sub>F</sub> =10 mA)	0.5 mW/sr (I <sub>F</sub> =10 mÅ)		
SE307-C	GaAs	ULTRA High output Narrow radiation angle	150	100	-40 to +100	1.25 (I <sub>F</sub> =50 mA)	0.01 (V <sub>R</sub> =5 V)	940 (I <sub>F</sub> =50 mA)	30 mW/sr (I <sub>F</sub> =50 mA)		
SE308	GaAs	Small package Lateral direction output	100	50	-40 to +100	1.14 (I <sub>F</sub> =20 mA)	0.01	940 (I <sub>F</sub> =20 mA)	0.85 mW/sr (I <sub>F</sub> =20 mA)		
SE310	GaAs	High output Small package	150	60	-40 to +100	1.25 (i <sub>F</sub> =50 mA)	0.01 (V <sub>R</sub> =5 V)	940 (i <sub>F</sub> =50 mA)	11 mW/sr (I <sub>F</sub> =50 mA)		
SE313	GaAs	ULTRA High output Middle radiation angle	150	100	-40 to +100	1.25 0.01 (I <sub>F</sub> =50 mA) (V <sub>R</sub> =5 V		940 (I <sub>F</sub> =50 mA)	25 mW/sr (I <sub>F</sub> =50 mA)		
SE1003-C	GaAlAs on GaAs	ULTRA High output Wide radiation angle	150	100	-40 to +100	1.27 (I <sub>F</sub> =50 mA)	0.01 (V <sub>R</sub> =5 V)	950 (í <sub>F</sub> =50 mA)	20 mW/sr (I <sub>F</sub> =50 mA)		

## **Avalanche Photo Diodes**

	Absolute Maximum Ratings (Ta = 25°C)			Тур	ical Characte								
Part Number			Detecting Area Size	V <sub>(BR)R</sub>	I <sub>D</sub> (nA)			η (%)		to tr			
	l <sub>F</sub> (mA)	I <sub>R</sub> (mA)	T <sub>stg</sub> (°C)	μm) Typ.	(V) Typ.	V <sub>R</sub> (V)	Max,	М Тур.	λ (nm)	Тур.	(ns) Typ.	Remarks	Package Style
NDL1102	100	_	-65 to +150	φ 240	120	V <sub>(BR)R</sub> -1.0	1.0**	150	630 850	65 65	0.5 10		TO-18 Can
NDL1202	100	-	-65 to +150	φ 240	200	V <sub>(BR)R</sub> -2.0	1.0**	150	850	70	1.0**		TO-18 Can
NDL5100	50	0.5	-55 to +125	φ 100	29	V <sub>(BR)R</sub> ×0.9	200	40	1300	75	0.5		TO-18 Can
NDL5100C	50	0.5	-55 to +125	<i>φ</i> 100	29	V <sub>(BR)R</sub> ×0.9	200	40	1300	75	0.5	Chip on carrier	Surface mount
NDL5100P	50	0.5	-40 to +70	φ 100	29	V <sub>(BR)R</sub> ×0.9	200	40	1300	75	0.5	With GI-50/125	Pigtail
NDL5102	50	0.5	-55 to +125	<i>ф</i> 30	35	V <sub>(BR)R</sub> ×0.9	80	50	1300	75	0.3		TO-18 Can
NDL5102C	50	0.5	-55 to +125	φ 30	35	V <sub>(BR)R</sub> ×0.9	80	50	1300	75	0.3	Chip on carrier	Surface mount
NDL5102P	50	0.5	-30 to +70	φ 30	35	V <sub>(BR)R</sub> ×0.9	80	50	1300	75	0.3	With SMF	Pigtail
NDL5500	10	0.5	-55 to +100	φ 50	70	V <sub>(BR)R</sub> ×0.9	20	40	1300 1550	85 80	_	f <sub>C</sub> = 1.0 GHz MIN.	TO-18 Can
NDL5500C	10	0.5	-55 to +100	φ 50	70	V <sub>(BR)R</sub> ×0.9	20	40	1300 1550	85 80	_	Chip on carrier f <sub>C</sub> = 1.0 GHz MIN.	Surface mount
NDL5500P	10	0.5	-40 to +70	φ 50	70	V <sub>(BR)R</sub> ×0.9	20	40	1300 1550	85 80	I	With GI-50/125 $f_c = 1.0$ GHz MIN.	Pigtail
OD8406	1.0	_	-40 to +80	_	205	50	0.2	700	850	75	1.5		Receptacle
OD8409	0.5	_	-40 to +80	-	30	V <sub>(BR)R</sub> ×0.9	0.2	40	1300	75	0.5	• •	Receptacle
OD8412	1.0	_	-40 to +80		205	50	0.2	700	850	75	1.5	With GI-62,5/125	Pigtail
OD8456	0.5	_	-40 to +80	_	30	V(BR)R×0.9	0,2	40	1300	75	0.5	With GI-62.5/125	Pigtail

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