



**LEDs**

Part Number	Material	Max. Ratings					$\lambda_P$ (nm) @ $I_F=50mA$		$\Delta\lambda$ (nm) @ $I_F=50mA$	$P_D$ (DC) (mW) @ $I_F=50mA$		$P_D$ (pulse)* (mW) @ $I_F=100mA$		$\theta$ (deg.) @ $I_F=50mA$	$f_c$ (MHz) @ $I_F=25mA$ @ $I_{RP}=4mA_{P-P}$		†
		$I_F$ (DC) @ $T_C \leq 50^\circ C$ (mA)	$I_F$ (pulse) @ $T_C \leq 50^\circ C$ (mA)	$V_R$ (V)	$T_C$ (°C)	$T_{totg}$ (°C)	Min.	Max.	Typ.	Min.	Typ.	Min.	Max.	Typ.	Min.	Typ.	
ME1013	AlGaAs	75	120	3	-40 to +100	-55 to +125	780	880	45	1.0	1.5	2.0	3.0	40	@-1.5dB 15 30		10
ME1303	AlGaAs	100	150	3	-40 to +100	-55 to +125	780	875	45	1.0	1.5	2.0	3.0	40	@-1.5dB 15 30		10
ME1504 ME1514	AlGaAs	75	120	3	-40 to +100	-55 to +125	780	880	45	0.5	1.5	1.0	3.0	20	@-1.5dB 10 30		10
ME7021 ME7521	InGaAsP	120	-	2	-30 to +80	-40 to +100	@ $I_F=100mA$ 1260 1340		@ $I_F=100mA$ 140	@ $I_F=100mA$ 0.8 1.0		-	-	@ $I_F=100mA$ 20	@ $I_F=70mA$ -1.5dB - 120		10 11
ME7022 ME7522 ME7922	InGaAsP	120	-	2	-30 to +80	-40 to +100	@ $I_F=100mA$ 1280 1340		@ $I_F=100mA$ 130	@ $I_F=100mA$ 0.8 1.0		-	-	@ $I_F=100mA$ 20	@ $I_F=70mA$ -1.5dB - 150		10 11 11

\* Pulse: duty D = 50%, I = 100kHz

**Si Avalanche Photodiodes**

Part Number	Material	Max. Ratings				$A_s$ (mm <sup>2</sup> )	$V_{(BR)R}$ (V) @ $I_R=100\mu A$			$\beta$ (%/°C)	$C_t$ (pF) @ $V_R=0.9$ $\times V_{(BR)R}$		$I_D$ (nA) @ $V_R=50V$		$R(A/W)$ @ $V_R=50V$ $\lambda=800nm$		$M_{max}$ @ $I_{po}=10nA$ $R_L=1k\Omega$ Typ.	$f_c$ (GHz) @ $M=100$ $R_L=50\Omega$ -3dB Typ.	†
		$I_R$ ( $\mu A$ ) @ $T_a \leq 80^\circ C$	$I_F$ (mA) @ $T_a \leq 80^\circ C$	$T_C$ (°C)	$T_{totg}$ (°C)		Min.	Typ.	Max.		Typ.	Max.	Min.	Typ.					
PD1002 PD1302	Si	200	10	-40 to +110	-55 to +150	$3 \times 10^{-2}$	100	150	200	0.12	1.5	2.0	0.3	1.0	0.4	0.45	1000	2	11
PD1005 PD1305	Si	200	10	-40 to +110	-55 to +150	$2 \times 10^{-1}$	100	150	200	0.12	5.0	7.0	0.3	1.0	0.4	0.45	1000	0.4	11

**Si PIN Photodiodes**

Part Number	Material	Max. Ratings				$A_s$ (mm <sup>2</sup> )	$I_D$ (nA) @ $V_R=10V$		$C_t$ (pF) @ $V_R=5V$ Typ.	$t_r$ (ns) @ $V_R=5V$ Typ.	$\lambda$ (nm)	$R(A/W)$ @ $V_R=5V$ $\lambda=850nm$		†
		$V_R$ (V)	$I_F$ (mA)	$T_C$ (°C)	$T_{totg}$ (°C)		Typ.	Max.				Min.	Typ.	
PD2101	Si	30	10	-40 to +110	-55 to +150	$2.7 \times 10^{-1}$	0.5	4	5	2	800-900	0.4	0.45	11

**InGaAs Photodiodes**

Part Number	Material	Max. Ratings				$A_s$ (mm <sup>2</sup> )	$I_D$ (nA) @ $V_R=15V$	$C_t$ (pF) @ $V_R=15V$	$f_c$ (MHz) @ $V_R=15V$ $R_L=50\Omega$ -3dB	$\lambda$ ( $\mu m$ )	$R$ (A/W)	†
		$I_R$ ( $\mu A$ )	$I_F$ (mA)	$T_C$ (°C)	$T_{totg}$ (°C)							
PD7002	InGaAs	3000	2	-30 to +80	-40 to +100	$7 \times 10^{-2}$ ( $\phi 300\mu m$ )	300max	10max	250min	1.0-1.6	@ $V_R=15V$ $\lambda=1.3\mu m$ 0.3min	11
PD7003	InGaAs	500	2	-30 to +80	-40 to +100	$8 \times 10^{-3}$ ( $\phi 100\mu m$ )	100max	3max	600min	1.0-1.6	@ $V_R=15V$ $\lambda=1.3\mu m$ 0.6min	11
PD7004	InGaAs	3000	2	-30 to +80	-40 to +100	$7 \times 10^{-2}$ ( $\phi 300\mu m$ )	300max	10max	250min	1.0-1.6	@ $V_R=15V$ $\lambda=1.3\mu m$ 0.6min	11
PD7005 PD7935	InGaAs	500	2	-30 to +80	-40 to +100	$5 \times 10^{-3}$ ( $\phi 80\mu m$ )	@ $V_R=10V$ 1max	@ $V_R=10V$ 1typ	@ $V_R=10V$ 1000min	1.0-1.6	@ $V_R=10V$ $\lambda=1.3\mu m$ 0.6min	11
PD7006 PD7936	InGaAs	3000	2	-30 to +80	-40 to +100	$7 \times 10^{-2}$ ( $\phi 300\mu m$ )	@ $V_R=10V$ 3max	@ $V_R=10V$ 10max	@ $V_R=10V$ 400min	1.0-1.6	@ $V_R=10V$ $\lambda=1.3\mu m$ 0.6min	11

† Column references page number of product outline drawings