

## Subminiature Point Contact Diodes\* (See Outline Drawing 37)

Types	MAXIMUM			MAXIMUM Reverse Current $I_R$		TOTAL CAPACITANCE	
	Peak Inverse Voltage Volts	Average Forward Current <sup>(1)</sup> ma	Surge Current <sup>(2)</sup> ma	25°C $\mu$ a	150°C $\mu$ a	$V_R = -2$ volts pf	$V_R = -40$ volts pf
12P2 through 19P2	200-10	40	120	0.5	100	0.4	0.3
23J2 through 28J2	200-10	60	120	0.2 <sup>(3)</sup>	100	0.4	0.3

NOTES: \*Made in France for General Electric by the Societe Europeenne Des Semiconducteurs (SESCO).

(1) For types 12P2 and 19P2 this parameter is 60 ma

(2) For types 12P2 and 19P2 this parameter is 180 ma

(3) For 90% of the production, the inverse current is less than 0.1  $\mu$ a.

## Matched Pairs and Quads (See Outline Drawing No. 43)

Type	Forward Voltage $V_F$ Volts	MAXIMUM Reverse Current $I_R$		Min. Breakdown Voltage $V_{BR}$ Volts $I_R = 5 \mu$ a	$\Delta V_F$ —Max. Forward Voltage difference between diodes in pairs or quads ( $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$ )		MAX. Forward Current Steady State DC ma	*		Comments
		25°C $\mu$ a	150°C $\mu$ a		$I_F = 0.1$ to 10 ma mv	$I_F = 10$ to 50 ma mv		Type	$I_F$ ma	
MP-1 (1N4306)	See above*	.05 @ 50V	50 @ 50V	75	10	20				(MP-1 was formerly 1N4306) Matched pairs in molded package. (Silicon Signal Diodes)
MP-2	1.0 @ 10 ma	.10 @ 30V	100 @ 30V	40	10	50				
MQ-1 (1N4307)	See above*	.05 @ 50V	50 @ 50V	75	10	20				(MQ-1 was formerly 1N4307) Matched quads in molded package. (Silicon Signal Diodes)
MQ-2	1.0 @ 10 ma	.10 @ 30V	100 @ 30V	40	10	50				

## Snap-off Diodes (See Outline Drawing No. 37)

Type	Power Dissipation 25°C mw	Peak Surge Current 1 $\mu$ s amperes	MINIMUM	MAXIMUM	MINIMUM	TYP.	MAX.	TYP.	MAX.
			Breakdown Voltage $I_R = 5 \mu$ amps $V_F$ Volts	Capacitance $V_R = 0V, f = 1$ mc $C_o$ pf	Stored Charge $Q_f$ pc/ma	Snap-off time $T_s = 2$ nsec. $I_F = 20$ ma $t_{sp}$ nsec.		Snap-off time $T_s = 2$ nsec. $I_F = 100$ ma $t_{sp}$ nsec.	
SSA-550 <sup>(2)</sup> /554 <sup>(3)</sup>	250	2	12	1.5	20	0.3	0.5		
SSA-551 <sup>(2)</sup> /555 <sup>(3)</sup>	250	2	8	4.0	20	0.3	0.5		
SSA-552 <sup>(2)</sup> /556 <sup>(3)</sup>	250	2	12	1.5	1.0			0.2 <sup>(1)</sup>	0.4
SSA-553 <sup>(2)</sup> /557 <sup>(3)</sup>	250	2	8	4.0	1.0			0.2 <sup>(1)</sup>	0.4

NOTES: (1) Limited by resolution time of test equipment. (2) DO-7 package. (3) Micro Silicon Diode—see Specifications 75. 28 for outline dimensions.

Microphoto Diodes\*<sup>(1)</sup> — NPN (See Outline Drawing No. 45)

Type	MAX. <sup>(2)</sup>		MAX. DARK CURRENT	TYPICAL DARK CURRENT	TYPICAL SENSITIVITY <sup>(3, 4)</sup>		TYPICAL PHOTOCURRENT DECAY TIMER $\mu$ sec.
	Bias Volts	Pc mw	at 24 vdc $\mu$ a	at 24 vdc $\mu$ a	at 250 ft. —c. $\mu$ a/ft. —c.	at 1000 ft. —c. $\mu$ a/ft. —c.	
31F2	40	50	0.1	0.02	0.2	0.8	1
32F2	40	50	0.1	0.02	0.5	1.5	1
33F2	40	50	0.1	0.02	0.9	2.2	1
34F2	40	50	0.1	0.02	1.6	5.0	1

NOTES: \*Made in France for General Electric by the Societe Europeenne Des Semiconducteurs (SESCO).

(1) All specs at 25°C unless noted otherwise.

(2) Storage temperature on all types is  $-65$  to  $+125^\circ\text{C}$ . Operating temperature on all types is  $-65$  to  $+100^\circ\text{C}$ .

(3) Light source—Tungsten Filament Lamp Operated at a Color Temperature of 2870°K.

(4) Maximum Sensitivity wave length 0.9 to 1.0 microns.