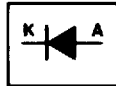


# Diodes and Rectifiers (General Purpose)



ECG Type	Description		Peak Reverse Voltage PRV Max V	Average Rectified Forward Current IO Max	Forward Current Repetitive Peak IFRM Max	Reverse Recovery Time trr	Forward Voltage Drop Max Vf	AFC	Fast Sw	Gen Purp	Fast Recovery	Fig. No.
ECG109	Gen Purp	Ge	100	200 mA	---	---	---			●		Z2
ECG110A	Gen Purp	Ge	40	50 mA	150 mA	---	---			●		Z2
ECG110MP	Matched Diode Pair	Ge	30	15 mA at 60°C	---	---	---	●		●		Z2
ECG112	UHF Mixer (Schottky)	Si	5	25 mA	---	---	.5 at 60 mA					Z4
ECG113A	Common Cathode Dual Diode, Center Tap, TV Horiz	Si	100	1.5 A	---	---	0.95 V at 1 A	●		●		Z15
ECG114	Series Dual Diodes, TV Horiz	Se	20	min 1.1 mA	---	---	---	●		●		Z12
ECG115	Common Anode, Dual Diode, TV Horiz AFC	Se	20	min 1.1 mA	---	---	---	●		●		Z12
ECG116	Gen Purp Rect	Si	600	1 A	---	---	0.8 V at 1 A			●		Z3
ECG117A	Gen Purp Rect, Metal Case	Si	1000	1.5 A	---	---	0.9 V			●		Z10
ECG120	Color TV Convg Rect	Se	18	65 mA	---	---	---			●		Z17
ECG125	Gen Purp Rect	Si	1000	2.5 A at 25°C Lead Temp	---	---	0.8 V at 1 A			●		Z3
ECG156	Gen Purp Rect	Si	1000	3 A	---	---	1.1 V at 1.5 A			●		Z6
ECG177	Fast Sw, Det, etc.	Si	200	160 mA	250 mA	50 ns	1.0 V at 100 mA		●			Z4
ECG178MP	Matched Diode Pair, AFC, AFT, etc.	Si	50	75 mA	100 mA	---	1.0 V at 5 mA	●				Z5
ECG506	Sw, Fast Recovery, Bst Damper, Blanking	Si	1400	2 A	3.5 A	500 ns	1.0 V at 1 A		●		●	Z6
ECG507	Gen Purp Rect, Gating, Centering	Si	50	250 mA	---	3 μs	1.0 V at 1 A			●		Z6
ECG515	Sw, Fast Recovery, SCR Defl Clamp	Si	800	3 A	9 A	1.3 μs	1.3 V at 4 A		●		●	Z8
ECG519	Fast Sw Diode	Si	100 (BRV)	200 mA	450 mA	4 ns	1.0 V at 10 mA		●			Z4
ECG525	Sw, Fast Recovery, Damper	Si	2000	1 A	---	500 ns (Fwd Rec)	2 V at 2 A		●		●	Z6
ECG551	Sw, Fast Recovery, Damper, Metal Case	Si	1500	1 A	---	1 μs	1.5 V at 2 A		●		●	Z9
ECG552	Gen Purp Rect, Fast Recovery	Si	600	1 A	---	200 ns	1.5 V at 250 mA		●	●	●	Z3
ECG558	Gen Purp Rect, Fast Recovery, HV	Si	1500	1 A	---	250 ns	1.2		●	●	●	Z6
ECG576	Sw, Ultra Fast Recovery	Si	400	5 A	150 A	35 ns	1.25 V at 5 A		●	●	●	Z6A
ECG577	Sw, Fast Recovery, HV	Si	1000	5 A	200 A	70 ns	1.7 V at 5 A		●	●	●	Z6A
ECG578	Schottky Barrier Rect	Si	90	1 A	50 A	---	.8 V at 1 A		●		●	Z3
ECG579	Schottky Barrier Rect	Si	90	3 A	150 A	---	.8 V at 3 A		●		●	Z6A
ECG580	Gen Purp Rect, Fast Recovery	Si	600	3 A	Single Surge 100 A	250 ns	1.3 V at 3 A		●	●	●	Z1A
ECG581	Gen Purp Rect, Fast Recovery	Si	400	8 A	Single Surge 150 A	200 ns	1.2 V at 3 A		●	●	●	Z41A
ECG582	TV Damper	Si	6000	300 mA	Single Surge 100 A	300 ns	8.0 V at 100 mA				●	Z17A
ECG583	Detector, Mixer, (Schottky) Hot Carrier Modulator	Si	70	15 mA	---	1 ps	.41 V at 1 mA	●	●	●	●	Z4

F

## Diodes and Rectifiers (General Purpose) (cont'd)

ECG Type	Description		Peak Reverse Voltage PRV Max V	Average Rectified Forward Current I <sub>O</sub> Max	Forward Current Repetitive Peak IFRM Max	Reverse Recovery Time trr	Forward Voltage Drop Max V <sub>F</sub>	AFC	Fast Sw	Gen Purp	Fast Recovery	Fig. No.
ECG584	Detector, Mixer, (Schottky) Hot Carrier Modulator	Si	20	35 mA	---	1 ps	.41 V at 1 mA	●	●	●	●	Z4
ECG585	Schottky Barrier Rect	Si	40	1 A	25 A	---	.6 V at 1 A		●		●	Z3
ECG586	Schottky Barrier Rect	Si	40	3 A	80 A	---	.525 V at 3 A		●		●	Z6A
ECG587	Sw, Ultra Fast Recovery	Si	200	1 A	30 A	35 ns	.95 V at 1 A		●	●	●	Z3
ECG588	Sw, Ultra Fast Recovery	Si	200	3 A	125 A	35 ns	.95 V at 3 A		●	●	●	Z6A
ECG590	Common Cathode Dual Diode, Hi Speed Sw	Si	75	200 mA 100 mA /Leg	300 mA	4 ns	1.2 V at 100 mA		●			Z67
ECG591	Common Anode Dual Diode, Hi Speed Sw	Si	75	200 mA 100 mA /Leg	300 mA	4 ns	1.2 V at 100 mA		●			Z67

## Diodes (Surface Mount)

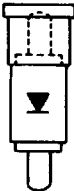
ECG Type	Description		Peak Reverse Voltage PRV Max V	Average Rectified Forward Current I <sub>O</sub> Max	Forward Current Repetitive Peak IFRM Max	Reverse Recovery Time trr	Forward Voltage Drop Max V <sub>F</sub>	AFC	Fast Sw	Gen Purp	Fast Recovery	Fig. No.
ECG592	Gen Purp, Sw	Si	200	200 mA	625 mA	50 ns	1 V at 200 mA		●	●		Z69
ECG593	Hi Speed Sw, Det	Si	75	250 mA	250 mA	6 ns	1 V at 250 mA		●		●	Z69
ECG594	Band Sw, r <sub>D</sub> = .7 Ω at 200 MHz	Si	35	100 mA	---	---	1.2 V at 100 mA					Z69
ECG595	Common Cathode Dual Diode, Hi Speed Sw, Gen Purp	Si	70	500 mA 250 mA /Leg	250 mA	6 ns	1 V at 250 mA	●	●	●	●	Z69
ECG596	Common Anode Dual Diode, Hi Speed Sw, Gen Purp	Si	70	500 mA 250 mA /Leg	250 mA	6 ns	1 V at 250 mA	●	●	●	●	Z69

## Controlled Avalanche Diode

ECG Type	V <sub>RM</sub> V Max	I <sub>ZSM</sub> A Max	V <sub>Z</sub> I <sub>Z</sub> = 1 mA V Max	I <sub>R</sub> μA Max	Fig. Z6B
ECG570	130	1 (Pulse)	135 - 150	10	<p>Color Band Denotes Cathode</p>

# MICROWAVE MIXER DIODES

Type No.	Test Freq. (MHz)	Noise Figure (dB)	I.F. IMPED. @ 30 MHz (Ohms)	VSWR Max. Ratio	Burn Out (ERGS)	Fig. No.
1N415C	9375	9.5	325-475	1.5	2.0	Z64
1N415E	9375	7.5	335-465	1.3	2.0	Z64
1N416C	3060	8.3	300-700	---	2.0	Z64
1N416E	3060	7.0	350-450	1.3	5.0	Z64



## PIN Diodes

ECG Type	Description and Application	Max. Power (mW)	V (BR) R Min. (Volts)	IR Max. (nA)	C <sub>T</sub> Max. (pf)	LS Typ. (nH)	RA Max. (Ohms)	Fig. No.
ECG553	Si PIN Diode, UHF, VHF Switch	200	30	150	2	2.5	1.2	Z4
ECG555	Si PIN Diode, Gen Purp & VHF Switch	400	35	100	1	3.0	0.7	Z11

## Diode and Rectifier Outlines

**Fig. Z1A ECG580**

COLOR BAND INDICATES CATHODE END

**Fig. Z2 DO-7 ECG 109 110MP**

BOTH LEADS .021" (1.53) MAX. DIA. (tinned)

(COLOR BAND DENOTES CATHODE)

**Fig. Z3 ECG DO-41**

116	552	585
125	578	587

COLOR BAND DENOTES CATHODE

**Fig. Z4 ECG DO-35**

112	553	600
177	583	616
519	584	

COLOR BAND DENOTES CATHODE

**Fig. Z5 ECG178MP**

(COLOR BAND DENOTES CATHODE)

**Fig. Z6 ECG 156 525 506 558 507**

COLOR BAND DENOTES CATHODE

**Fig. Z6A DO-27 ECG 576 577 579 586 588**

COLOR BAND DENOTES CATHODE

**Fig. Z7 ECG 606 607**

**Fig. Z8 ECG515**

**Fig. Z9 ECG551**

**Fig. Z10 ECG117A**

**Fig. Z11 ECG555**

**Fig. Z12 ECG114 SERIES CONNECTED**

**ECG115 COMMON ANODE**