

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 Convrg 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
ECG562	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

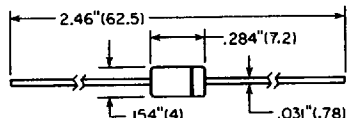
Diodes and Rectifiers (General Purpose) (cont'd)

ECG Type	Description		Peak Reverse Voltage PRV Max V	Average Rectified Forward Current I _O Max	Forward Current Repetitive Peak I _{FRM} Max	Reverse Recovery Time t _{rr}	Forward Voltage Drop Max V _F	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 _O Max	Forward Current Repetitive Peak I _{FRM} Max	Reverse Recovery Time t _{rr}	Forward Voltage Drop Max V _F	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 _D = .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 _{RM} V Max	I _{ZSM} A Max	V _Z I _Z = 1 mA V Max	I _R μA Max	Fig. Z6B 
ECG570	130	1 (Pulse)	135 - 150	10	

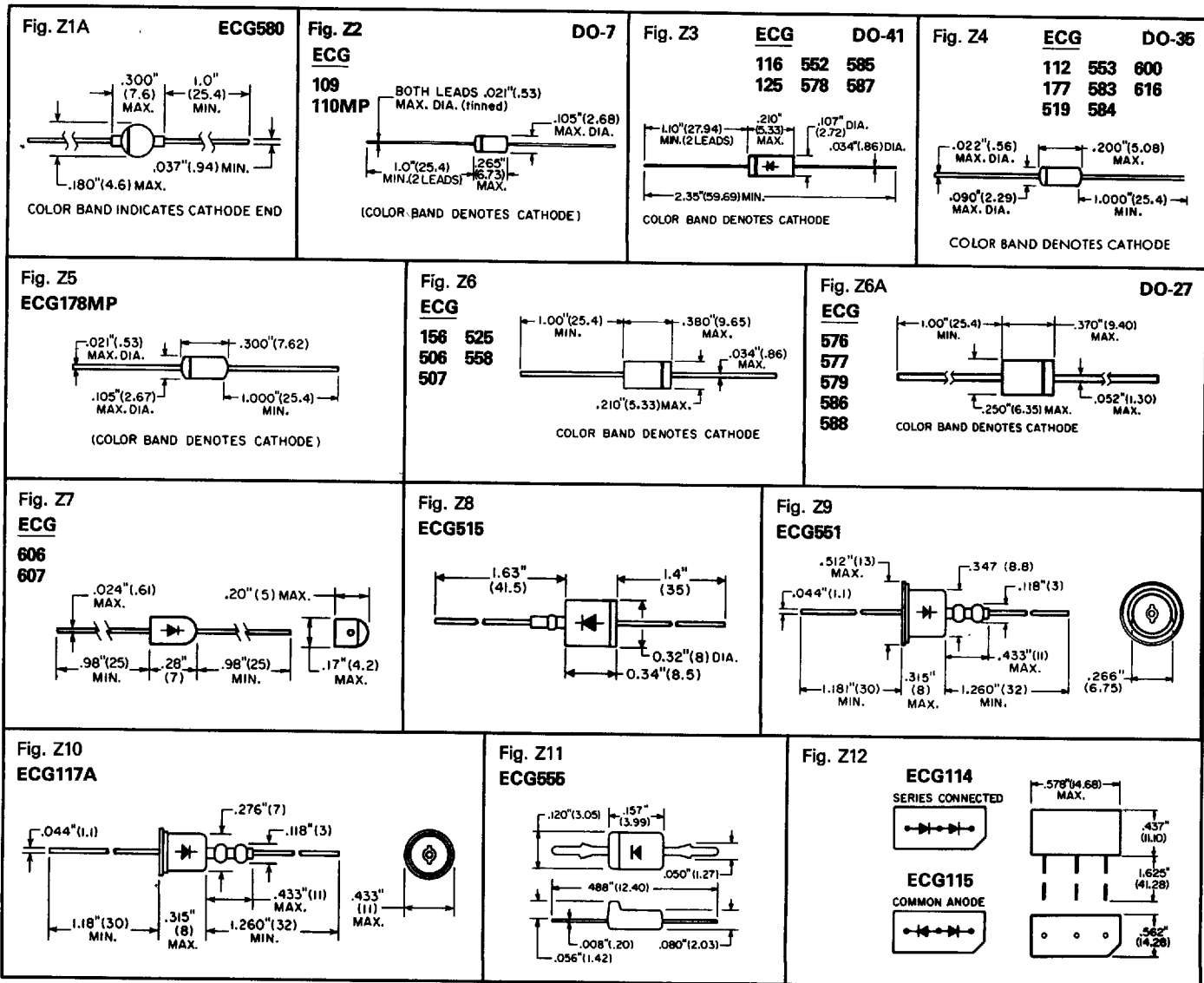
Color Band Denotes Cathode

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 _T 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

Diode and Rectifier Outlines (cont'd)

Fig. Z13

ECG

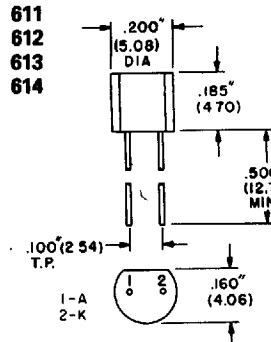
610
611
612
613
614

Fig. Z14

ECG605

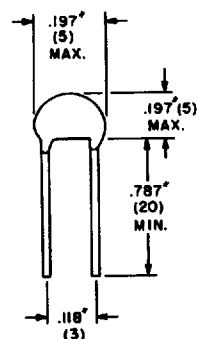
COLOR END
DENOTES CATHODE

Fig. Z15

ECG113A

COMMON CATHODE

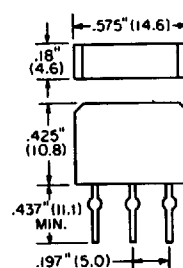


Fig. Z17

ECG120

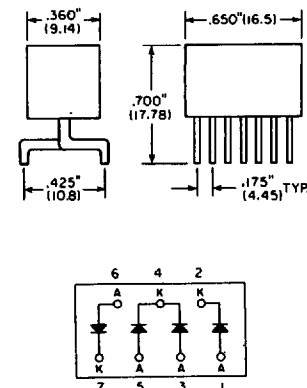


Fig. Z17A

ECG582

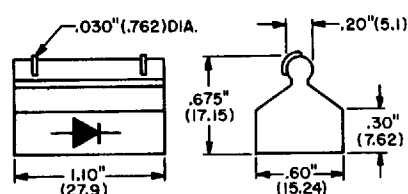


Fig. Z41A

ECG581

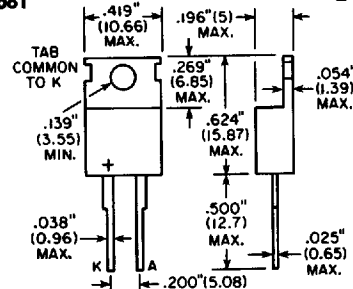
TO-220
2 Lead

Fig. Z64

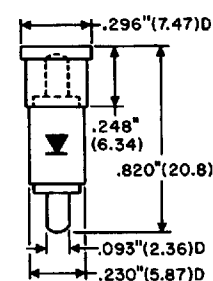
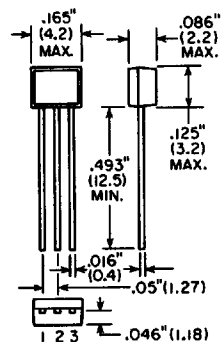
1N415C
1N415E
1N416C
1N416E(DIODE POLARITY IS REVERSED
WHEN BRASS CAP IS REMOVED
AND PLACED ON OPPOSITE END)

Fig. Z67

ECG

590
591

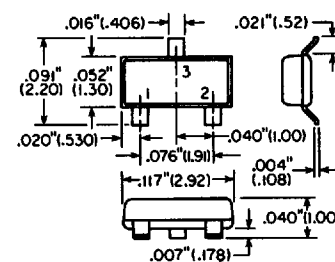
ECG	1	2	3
590	A	K	A
591	K	A	K



SP-92

Fig. Z69

ECG

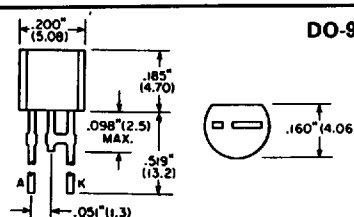
592
593
594
595
596

ECG	1	2	3
592	A	NC	K
593	A	NC	K
594	A	NC	K
595	A	A	K
596	K	K	A

SOT-23

Voltage Regulator for Electronic Tuner

ECG615A	Min.	Typ.	Max.	$T_A = 25^\circ\text{C}$
V_z	31	33	35	V
$\Delta V_z / \Delta T$	-1	0	+1	mV/°C
P_D	200 mW ($T_A = 75^\circ\text{C}$)			

Fig. Z13-2
ECG615A

DO-92