



SEMICONDUCTOR

TECHNICAL SPECIFICATION

Z90 THRU Z330

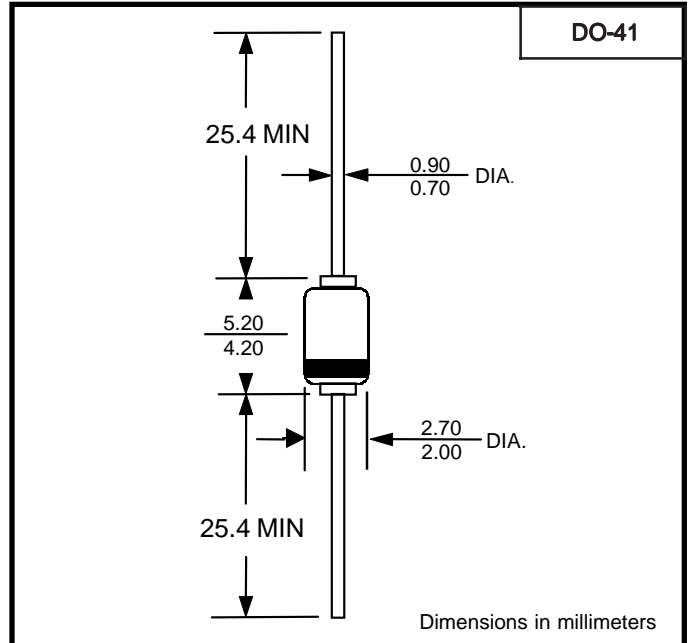
ZENER SILICON RECTIFIER

1 WATT VOLTAGE RANGE- 90 to 330 Volts CURRENT- 0.5 Ampere

Absolute Maximum Ratings (Ta=25°C)

Items	Symbol	Ratings	Unit
Power Dissipation	P_{TOT}	1.0	W
Forward Voltage @ $I_f = 1.0A$	V_f	1.0	V
Vz Tolerance		20	%
Junction Temp.	T_j	-65 to 175	°C
Storage Temp.	T_{STG}	-65 to 175	°C

Dimensions



Mechanical Data

Items	Materials
Package	DO-41
Case	Molded Plastic
Lead	Mil-STD-202E method 208C guaranteed
Epoxy	UL94V-0 rate flame retardant
Weight	0.4 gram

Electrical Characteristics (Ta=25°C)

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE		MAX ZENER IMPEDANCE		MAXIMUM REVERSE CURRENT		MAXIMUM FORWARD VOLTAGE
	$V_z(V)$	@ $I_{zT}(mA)$	R_z (ohms)	@ $I_{zT}(mA)$	R_{zk} (ohms)	@ $I_{zk}(mA)$	@ V_R (V)	I_R (μA)	$I_F=1.0A$
Z90	90	2.7	250	2.7	2000	0.25	70	0.5	1.0
Z100	100	2.5	350	2.5	3000	0.25	75	0.5	1.0
Z105	105	2.4	400	2.4	3500	0.25	77	0.5	1.0
Z110	110	2.3	450	2.3	4000	0.25	80	0.5	1.0
Z115	115	2.2	500	2.2	4250	0.25	85	0.5	1.0
Z120	120	2.1	550	2.1	4500	0.25	90	0.5	1.0
Z130	130	1.9	700	1.9	5000	0.25	95	0.5	1.0
Z135	135	1.85	750	1.85	5250	0.25	100	0.5	1.0
Z140	140	1.8	800	1.8	5500	0.25	105	0.5	1.0
Z150	150	1.7	1000	1.7	6000	0.25	110	0.5	1.0
Z160	160	1.6	1100	1.6	6500	0.25	120	0.5	1.0
Z170	170	1.5	1200	1.5	6750	0.25	130	0.5	1.0
Z180	180	1.4	1350	1.4	7000	0.25	140	0.5	1.0

NOTE: Standard tolerance: +20%, Suffix "A": +10%

Electrical Characteristics (Ta=25°C)

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE		MAX ZENER IMPEDANCE		MAXIMUM REVERSE CURRENT		MAXIMUM FORWARD VOLTAGE
	Vz(V)	@Izt(mA)	Rz (ohms)	@Izt(mA)	Rzk (ohms)	@Izk(mA)	@VR (V)	IR (uA)	IF=1.0A
Z190	190	1.3	1500	1.3	7500	0.25	150	0.5	1.0
Z200	200	1.2	1700	1.2	8000	0.25	160	0.5	1.0
Z220	220	1.1	2000	1.1	8250	0.25	170	0.5	1.0
Z240	240	1.0	2200	1.0	8500	0.25	180	0.5	1.0
Z270	270	0.9	2500	0.9	8750	0.25	200	0.5	1.0
Z300	300	0.8	3000	0.8	9000	0.25	220	0.5	1.0
Z330	330	0.75	4000	0.75	9500	0.25	240	0.5	1.0

NOTE: Standard tolerance: +-20%, Suffix "A": +-10%