

# SCHOTTKY DIODES

## Silicon Schottky Barrier Diodes in DO-35 Package

for general purpose applications with low forward voltage drop and very fast switching times.

Using the type designations LL101A, LL103A, and so on, these Schottky Barrier diodes are available in the MiniMELF package with the same electrical characteristics.

Type	Peak Inv. Voltage PIV	Power Dissipation at 25°C	Junction and Storage Temp.	Forward Voltage Drop $V_F$ at $I_F$				Reverse Current $I_R$ at $V_R$		Capacitance at $V_F = V_R = 0$ , $f = 1$ MHz	Reverse Recovery Time $t_r$	Conditions
	Volts	max. mW	max. °C	max. V	at mA	max. V	at mA	max. $\mu$ A	at V	max. pF	max. ns	
SD101A*	60	400	200	0.41	1	1.0	15	0.2	50	2.0	1	$I_F = I_R = 5$ mA to 0.1 $I_R$
SD101B	50	400	200	0.40	1	0.95	15	0.2	40	2.1	1	$I_F = I_R = 5$ mA to 0.1 $I_R$
SD101C	40	400	200	0.39	1	0.90	15	0.2	30	2.2	1	$I_F = I_R = 5$ mA to 0.1 $I_R$
SD103A	40	400	125	0.37	20	0.6	200	5.0	30	50	10	$I_F = I_R = 200$ mA to 0.1 $I_R$
SD103B	30	400	125	0.37	20	0.6	200	5.0	20	50	10	$I_F = I_R = 200$ mA to 0.1 $I_R$
SD103C	20	400	125	0.37	20	0.6	200	5.0	10	50	10	$I_F = I_R = 200$ mA to 0.1 $I_R$

\* JEDEC Equivalent: 1N6263

# SOLID STATE TUNER COMPONENTS

## Variable-Capacitance Tuner Diodes (delivered in matched sets)

Type	Package	Capacitance		Capacitance Ratio				Series Resistance				Reverse Current	
		min. pF	max. pF	at $V_R$ V	min.	max.	at $V_R =$ V to V	$\Omega$ typ.	$\Omega$ max.	at fMHz	and CpF	max. nA	at $V_R$ V
BB221	DO-35	1.8	2.2	28	8.0	9.5	1 to 28	0.55	0.7	470	9	30	30
BB222	DO-35	1.8	2.5	28	7.3	9.5	1 to 28	0.80	1.0	470	9	30	30
BB329	DO-35	2.5	3.2	28	12	-	1 to 28	0.85	-	330	25	30	30
BB404A***	TO-236	42	43.5	2	1.65	1.75	2 to 8	-	0.4	100	38	20	10
BB404B	TO-236	43	44.5	2	1.65	1.75	2 to 8	-	0.4	100	38	20	10
BB404C	TO-236	44	45.5	2	1.65	1.75	2 to 8	-	0.4	100	38	20	10
BB404D	TO-236	45	46.5	2	1.65	1.75	2 to 8	-	0.4	100	38	20	10
BB404E	TO-236	46	47.5	2	1.65	1.75	2 to 8	-	0.4	100	38	20	10
BB510	TO-236**	440	600	1	15	-	1 to 9	-	-	-	-	30	10
BB521*	DO-35	1.8	2.2	28	8.0	9.5	1 to 28	0.55	0.7	470	9	30	30
BB523	DO-35	1.9	2.25	28	9.5	15	1 to 28	-	0.8	470	14	30	30
BB529*	DO-35	2.5	3.2	28	12	-	1 to 28	0.85	-	330	25	30	30
BB531	DO-35	3.15	3.55	28	19.5	25	1 to 28	0.9	1.0	300	25	30	30
BB601	$\approx$ 60A2	0.9	1.2	28	8.0	9	1 to 28	-	1.2	470	9	30	30
BB621*	MiniMELF	1.8	2.2	28	8.0	9.5	1 to 28	0.55	0.7	470	9	30	30
BB622	MiniMELF	1.8	2.5	28	7.3	9.5	1 to 28	0.80	1.0	470	9	30	30
BB623	MiniMELF	1.9	2.25	28	9.5	15	1 to 28	-	0.8	470	14	30	30
BB629*	MiniMELF	2.5	3.2	28	12	-	1 to 28	0.85	-	330	25	30	30
BB631	MiniMELF	3.15	3.55	28	19.5	25	1 to 28	0.9	1.0	300	25	30	30
BB721	$\approx$ 60A2	2.0	2.29	28	8.0	-	1 to 28	-	0.5	470	14	30	30
BB723	$\approx$ 60A2	1.9	2.25	28	9.5	15	1 to 28	-	0.8	470	14	30	30
BB729	$\approx$ 60A2	2.38	2.93	28	12	-	1 to 28	-	0.8	470	25	30	30
BB730	$\approx$ 60A2	2.7	2.9	28	14.8	16.8	1 to 28	-	0.9	330	25	30	28
BB731	$\approx$ 60A2	3.15	3.55	28	19.5	25	1 to 28	0.9	1.0	300	25	30	30

\* These types are successors of types BB221 and BB329 respectively, providing an improved linearity of the capacitance versus reverse bias curve.

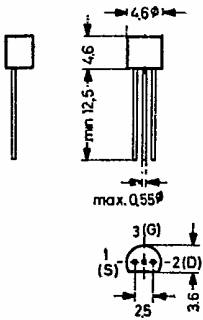
\*\* Pins 1 and 2: Cathode, Pin 3: Anode

\*\*\* The types BB404 are dual capacitance diodes with common cathode. Pin 1: Cathode, Pin 2: Anode 1, Pin 3: Anode 2.

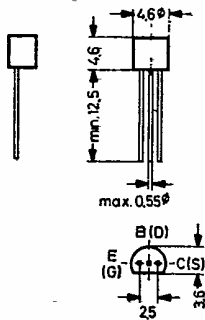
# PACKAGE OUTLINES

## All Dimensions in mm

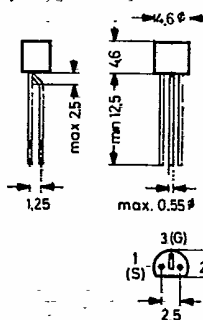
**TO-92 Plastic Package (10D3)**  
Pin in-Line "A"  
Weight approx. 0.18 g



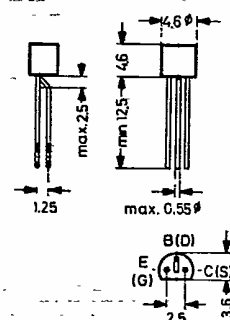
**TO-92 Plastic Package (10D3)**  
Pins in-Line "B"  
Weight approx. 0.18 g



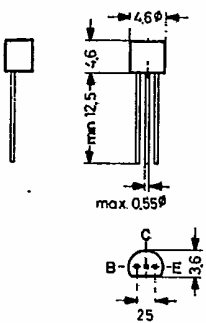
**TO-92 Plastic Package**  
Pins TO-18 "A"  
Weight approx. 0.18 g



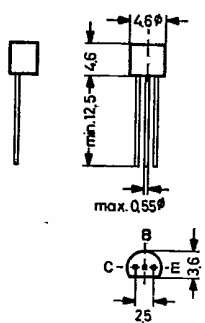
**TO-92 Plastic Package**  
Pins TO-18 "B"  
Weight approx. 0.18 g



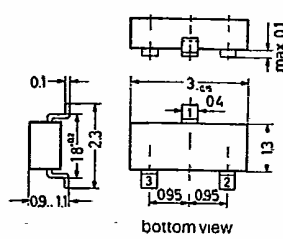
**TO-92 Plastic Package**  
Pins in-Line "D"  
Weight approx. 0.18 g



**TO-92 Plastic Package**  
Pins in-Line "E"  
Weight approx. 0.18 g



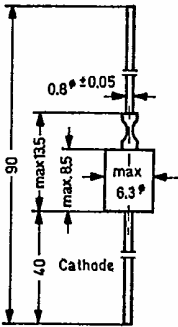
**TO-236 Plastic Package (23A3)**  
Weight approx. 0.01 g



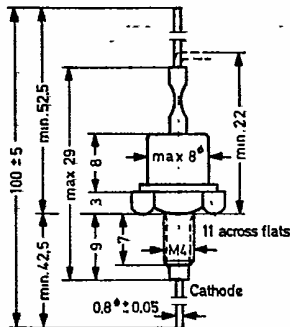
# PACKAGE OUTLINES

All Dimensions in mm

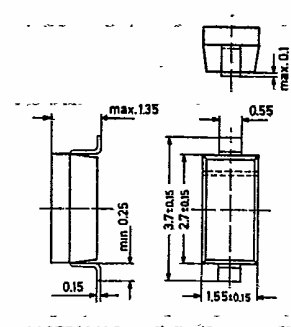
**DO-13 Metal Case**  
Weight approx. 1.4 g



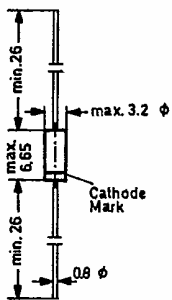
**Stud-Mounted Metal Case**  
Weight approx. 6 g



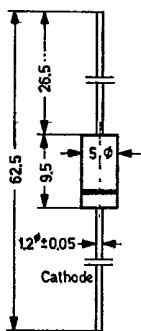
**60A2 Diode Plastic Package**  
Weight approx. 0.013 g



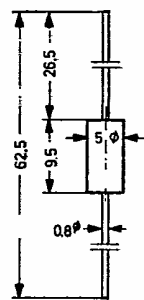
**Diode Plastic Package P1**  
Weight approx. 0.4 g



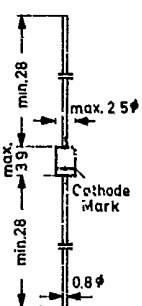
**Diode Plastic Package P2**  
Weight approx. 1 g



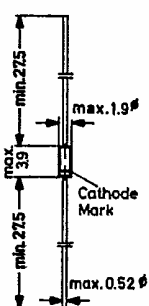
**Diode Plastic Package P3**  
Weight approx. 0.6 g



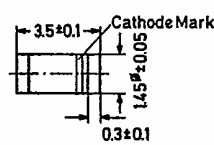
**DO-41 Glass Case**  
Weight approx. 0.35 g



**DO-35 Glass Case**  
Weight approx. 0.13 g



**MiniMELF Glass Case**  
Weight approx. 0.05 g



**MELF Glass Case**  
Weight approx. 0.25 g

