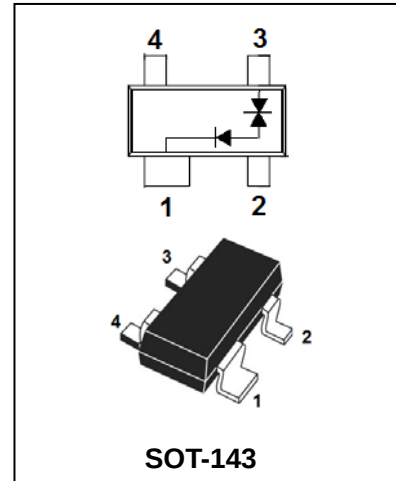


Small Surface Mount Diode

DB307AC

FEATURES

- Ideal for low power amplification.
- Ultra-Small surface mount package.
- Epitaxial planar die construction.



APPLICATIONS

- General diode amplification.

ELECTRICAL CHARACTERISTICS D1 Section @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test Condition	Min	TYP	MAX	UNIT
Reverse breakdown Voltage	$V_{(BR)R}$	$I_{BR} = 0.1mA$	600	-	-	V
Reverse Leakage Current	I_R	$V_R = 600V$	-	-	5	μA
Forward voltage	V_F	$I_F = 200mA$	-	-	1200	mV

ELECTRICAL CHARACTERISTICS D2 Section @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test Condition	Min	TYP	MAX	UNIT
Reverse breakdown Voltage	V_{BO1} V_{BO2}	$C = 22nF$ See diagram 1	20	-	32	V
Breakdown Voltage Symmetry	$[+V_{BO1} - -V_{BO2}]$	$C = 22nF$ See diagram 1	-	-	5	V
Dynamic Breakdown Voltage	$+ \Delta V $ $- \Delta V $	$\Delta I = [I_{BO} \text{ to } I_F = 10mA]$	5	-	-	V
Reverse Leakage Current	$+I_R$ $-I_R$	$V_{R1} = 16V$ $V_{R2} = 16V$	-	-	10	V
Output voltage	V_o	See diagram 2	5	-	-	V
Breakdown current	I_{BO}	$C = 22nF$	100	50	100	μA
Leakage current	I_B	$V_B = 0.5V_{BOmax}$ See diagram 1	-	-	10	μA
Rise time	t_r	See diagram 3	-	1.5	-	μs

Small Surface Mount Diode

DB307AC

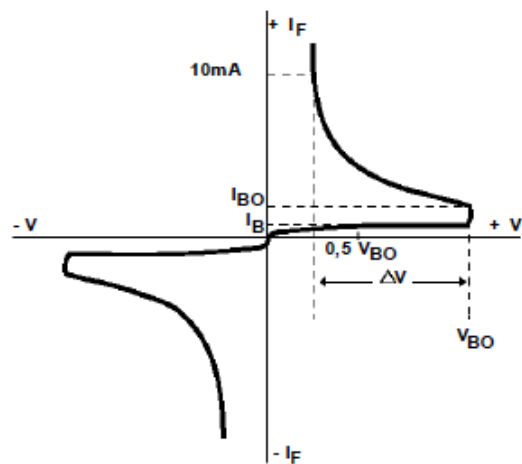


DIAGRAM 1 : Current-voltage characteristics

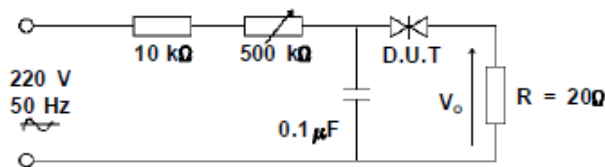


DIAGRAM 2 : Test circuit for output voltage

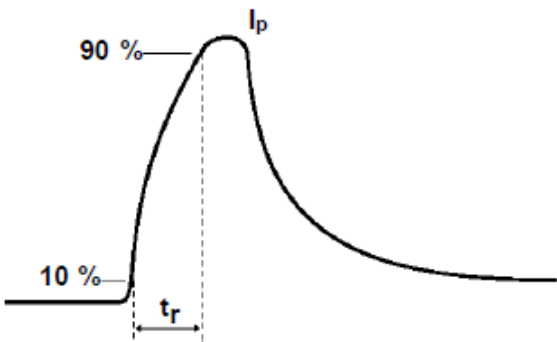


DIAGRAM 3 : Test circuit see diagram 2.
Adjust R for $I_p=0.5\text{A}$

PACKAGE OUTLINE

Plastic surface mounted package

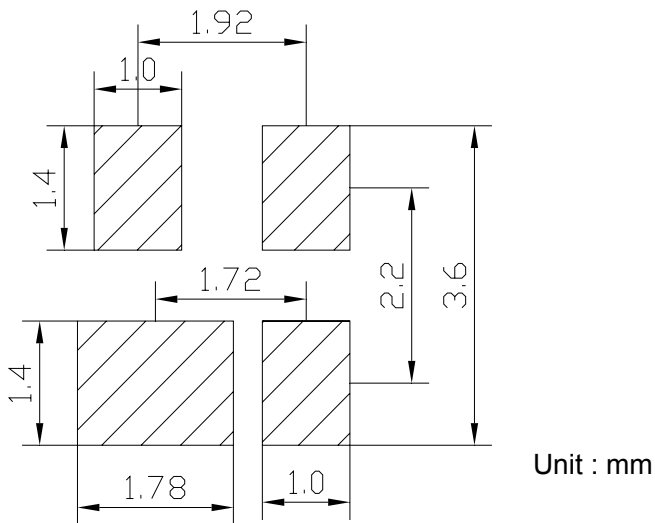
SOT-143

The mechanical drawing shows the SOT-143 package from three perspectives: top, side, and front. Dimensions are labeled as follows: A (total width), B (height), C (front flange height), D (lead width), E (lead pitch), F (lead thickness), G (flange width), H (lead length), J (lead diameter), and K (total height).

SOT-143		
Dim	Min	Max
A	2.85	2.95
B	1.20	1.40
C	1.0 Typical	
D	0.78	0.88
E	1.85	1.95
F	0.30	0.50
G	1.64	1.74
H	0.02	0.1
J	0.1 Typical	
K	2.30	2.50
All Dimensions in mm		

Small Surface Mount Diode

DB307AC

SOLDERING FOOTPRINT**PACKAGE INFORMATION**

Device	Package	Shipping
DB307AC	SOT-143	3000/ Tape&Reel