

DB3 DB4 SMDB3

ELECTRICAL CHARACTERISTICS (Tj = 25°C unless otherwise specified)

Symbol	Parameter	Test Conditions		SMDB3	DB3	DB4	Unit
V _{BO}	Breakover voltage *	C = 22nF **	MIN.	28	28	35	V
			TYP.	32	32	40	
			MAX.	36	36	45	
V _{BO1} - V _{BO2}	Breakover voltage symmetry	C = 22nF **	MAX.	3			V
Δ V	Dynamic breakover voltage *	V _{BO} and V _F at 10mA	MIN.	10	5		V
V _O	Output voltage *	see diagram 2 (R=20Ω)	MIN.	10	5		V
I _{BO}	Breakover current *	C = 22nF **	MAX.	10	50		μA
tr	Rise time *	see diagram 3	MAX.	0.50	2		μs
I _R	Leakage current *	V _R = 0.5 V _{BO} max	MAX.	1	10		μA
I _P	Peak current *	see diagram 2 (Gate)	MIN.	1	0.30		A

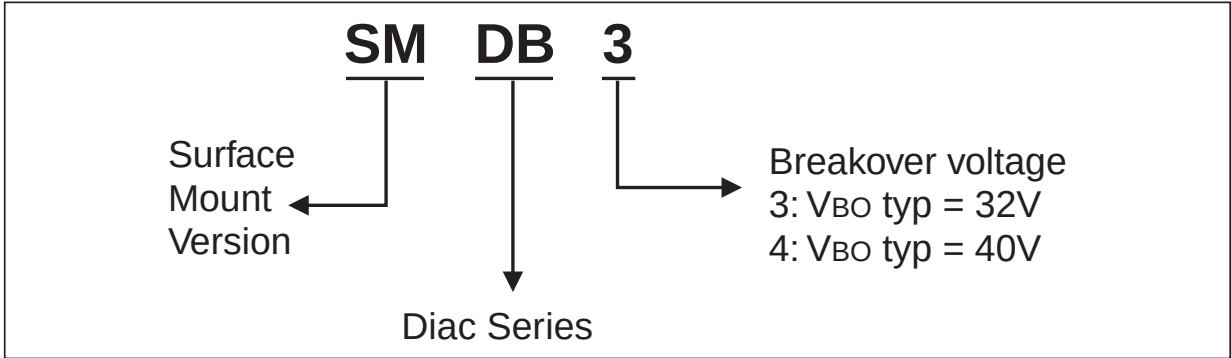
* Applicable to both forward and reverse directions.

** Connected in parallel to the device.

PRODUCT SELECTOR

Part Number	V _{BO}	Package
SMDB3	28 - 36	SOT-23
DB3	28 - 36	DO-35
DB4	35 - 45	DO-35

ORDERING INFORMATION



OTHER INFORMATION

Part Number	Marking	Weight	Base Quantity	Packing Mode
SMDB3	DB3	0.01 g	3000	Tape & Reel
DB3	DB3 (Blue Body Coat)	0.15 g	5000	Tape & Reel
DB4	DB4 (Blue Body Coat)	0.15 g	5000	Tape & Reel

Diagram 1: Voltage - current characteristic curve.

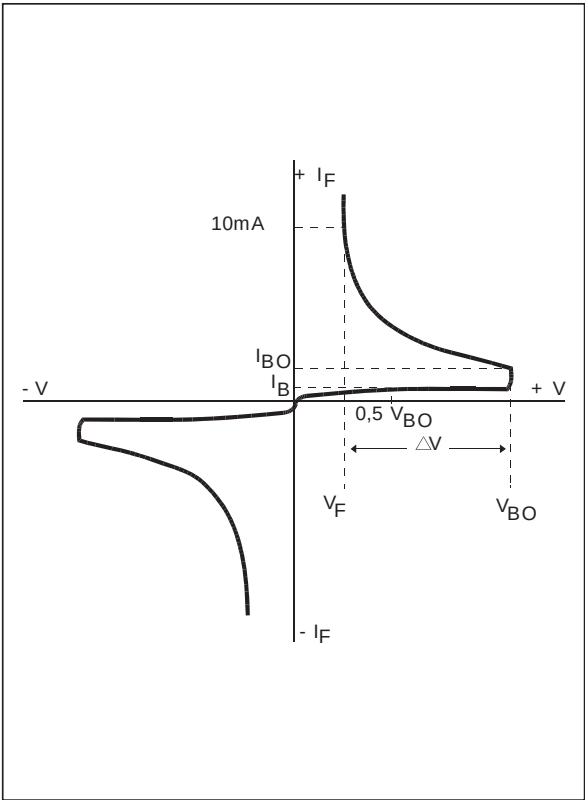


Diagram 2: Test circuit.

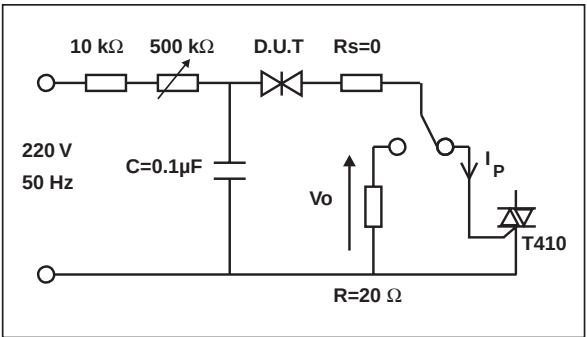


Diagram 3: Rise time measurement.

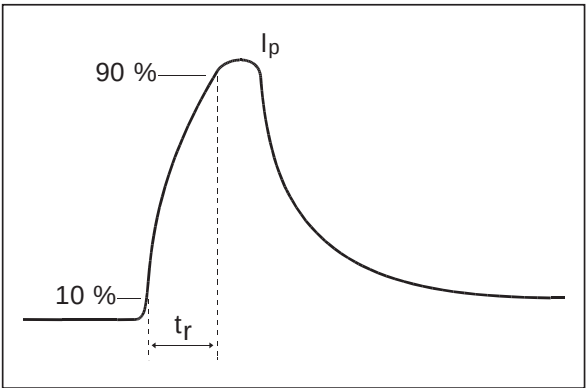


Fig. 1: Relative variation of VBO versus junction temperature (typical values).

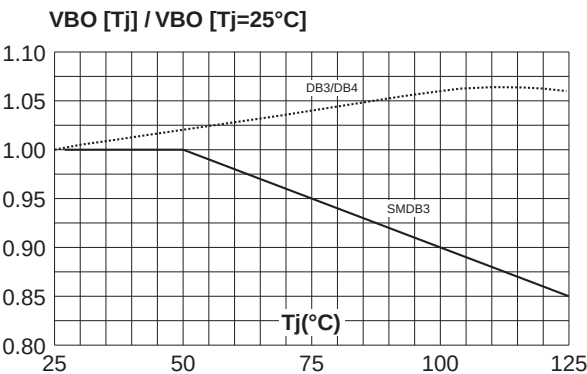


Fig. 2: Repetitive peak pulse current versus pulse duration (maximum values).

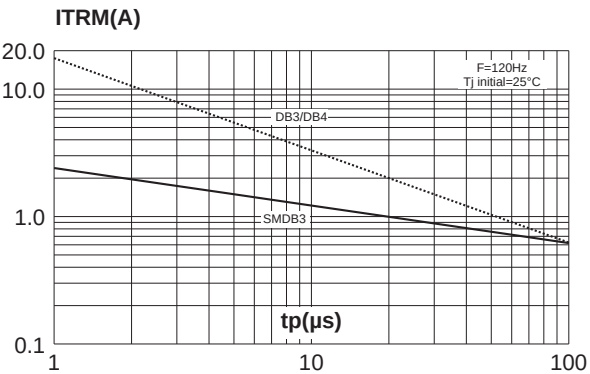
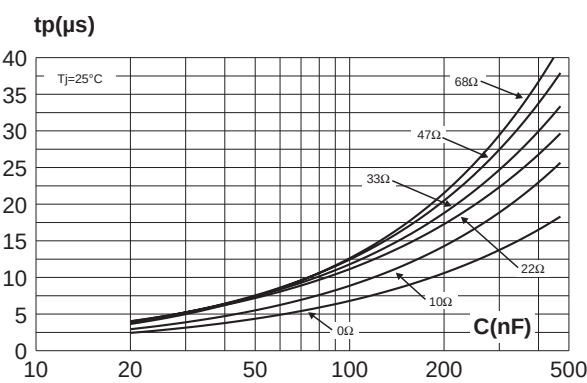
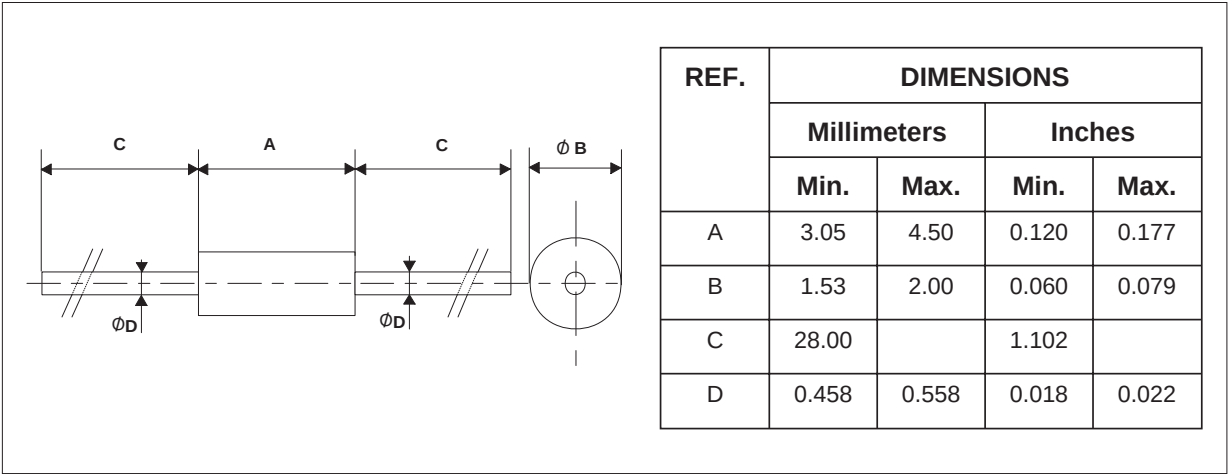


Fig. 3: Time duration while current pulse is higher 50mA versus C and Rs (typical values).



PACKAGE MECHANICAL DATA (in millimeters)
DO-35



PACKAGE MECHANICAL DATA (in millimeters)

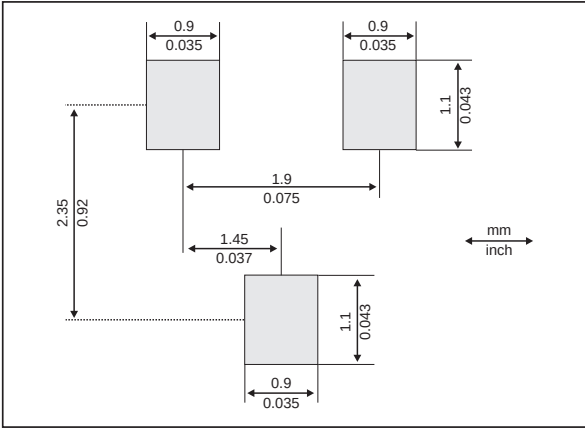
SOT-23

Top and side views of a component. The top view shows a rectangular body with a central slot of width E and a side feature of width B . The side view shows a rectangular body with a central slot of width A and a side feature of width $A1$. The height of the body is D . The distance from the top edge to the center of the slot is e , and the total height of the slot is $e1$. The distance from the bottom edge to the center of the slot is S .

Side view of a component showing a rectangular body with a height of H . The body has a central slot of width L and a side feature of width c .

REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.89	1.4	0.035	0.055
A1	0	0.1	0	0.004
B	0.3	0.51	0.012	0.02
c	0.085	0.18	0.003	0.007
D	2.75	3.04	0.108	0.12
e	0.85	1.05	0.033	0.041
e1	1.7	2.1	0.067	0.083
E	1.2	1.6	0.047	0.063
H	2.1	2.75	0.083	0.108
L	0.6 typ.		0.024 typ.	
S	0.35	0.65	0.014	0.026

FOOTPRINT



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