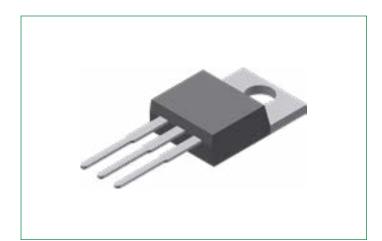
DSA60C100PB

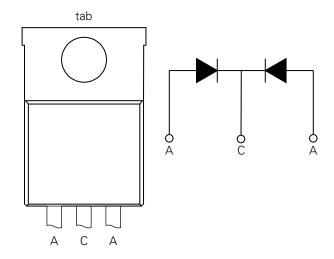
100 V, 60 A Schottky Rectifier Diode







Pinout Diagram (TO-220-3L AB)



C: Cathode; A: Anode; tab: Cathode

Features:

- Very low V_F
- Extremely low switching losses
- Low I_{RM} values
- Improved thermal behavior
- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Terminals finish: 100% pure tin
- This is a Pb-free device
- Epoxy meets UL 94 V-0

Applications:

- Rectifiers in Switch Mode Power Supplies (SMPS)
- Free wheeling diode in low voltage converters

Product Summary

	Characteristic	Value	Unit
	V_{RRM}	100	V
	I _{FAV}	2 x 30	А
-	V _E	0.78	V

DSA60C100PB Diode **Datasheet**

Maximum Ratings ($T_A = 25$ °C unless otherwise specified)

Symbol	Characteristics	Condition	Max.	Units	
V _{RRM}	Peak Repetitive Reverse Voltage				
V_{RWM}	Working Peak Reverse Voltage	_	100	V	
V _R	DC Blocking Voltage				
	Average Poetified Forward Current	50% duty cycle @T _c = 150°C,	30 (Per Leg)		
FAV	Average Rectified Forward Current	rectangular wave form	60 (Per Device)	A	
I _{FSM}	Peak One Cycle Non-Repetitive Surge Current (Per Leg)	10 ms, Half Sine pulse, T _{VJ} = 25°C	340	А	
P _{tot}	Total Power Dissipation	T _C = 25°C	175	W	

Electrical Characteristics (T_A = 25°C unless otherwise specified)

Symbol	Characteristics	Conditions	Тур.	Max.	Units
V_{F1}	- Forward Voltage Drop (Per Leg) ¹	@ 30 A, Pulse, T _{VJ} = 25°C	_	0.95	V
V_{F2}		@ 30 A, Pulse, T _{VJ} = 125°C	_	0.78	V
I _{R1}	Reverse Current (Per Leg) ¹	$@V_R = rated V_R, T_{VJ} = 25^{\circ}C$	_	450	uA
I _{R2}		$@V_R = rated V_R, T_{VJ} = 125^{\circ}C$	_	5	mA
C _T	Junction Capacitance (Per Leg)	$@V_R = 12 \text{ V, T}_C = 25^{\circ}\text{C}$ $f_{SIG} = 1 \text{ MHz}$	334	_	pF

Note 1: Pulse width < 300 μ s, duty cycle < 2%

Thermal-Mechanical Specifications

Symbol	Characteristics	Condition	Specification	Units
T _{VJ}	Junction Temperature	-	-55 to +175	°C
T _o	Operation temperature	-	-55 to +150	°C
T _{stg}	Storage Temperature	_	-55 to +150	°C
M _D	Mounting torque	-	Min 0.4 Max 0.6	Nm
F _c	Mounting force with clip	_	Min 20 Max 60	N
R_{thJC}	Maximum Thermal Resistance Junction to Case	DC operation	0.85	K/W
R _{thJS}	Typical Thermal Resistance Junction to Heat Sink	-	0.5	K/W
wt	Approximate Weight	-	2	g



DSA60C100PB Diode **Datasheet**

Characteristic Curves

Fig. 1. Typical Forward Characteristics

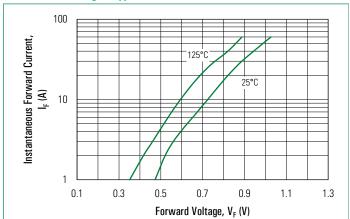
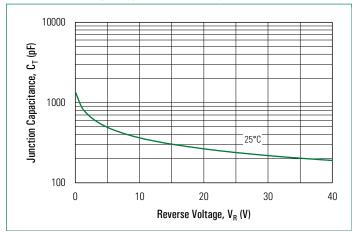


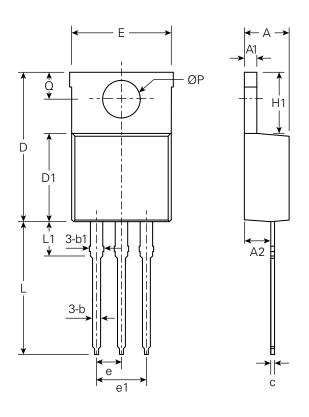
Fig. 3. Typical Junction Capacitance





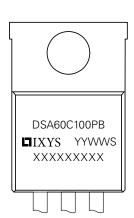
DSA60C100PB Diode **Datasheet**

Part Outline Drawing (TO-220-3L AB)



Cumbal	Inches			Millimeters		
Symbol	Min.	Typical	Max.	Min.	Typical	Max.
А	0.140	_	0.190	3.56	_	4.83
A1	0.020	_	0.055	0.51	_	1.40
A2	0.080	_	0.115	2.03	_	2.92
b	0.015	_	0.040	0.38	_	1.02
b1	0.045	_	0.070	1.14	_	1.78
С	0.012	_	0.024	0.31	_	0.61
D	0.560	_	0.650	14.22	_	16.51
D1	0.330	_	0.371	8.38	_	9.42
Е	0.380	_	0.420	9.65	_	10.67
е	-	0.100	_	_	2.54	-
e1	-	0.200	_	_	5.08	_
H1	0.230	_	0.270	5.84	_	6.86
L	0.500	_	0.580	12.70	_	14.73
L1	_	_	0.250	_	_	6.35
ØP	_	0.140	_	_	3.56	_
Q	0.100	_	0.135	2.54	_	3.43

Part Number and Marking



D = Diode

S = Schottky Diode

A Low VF

60 = Forward Current (60A)

C Common Cathode

100 = Reverse Voltage (100V)

PB = Package Code (TO-220AB)

YY = Year

WW = Work Week

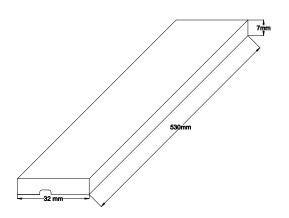
S = Plant Location Code

XXXXXXXXX = Lot Number

Ordering Information

Part Number	Marking	Packing Mode	Quantity	
DSA60C100PB	DSA60C100PB	Tube	50 pcs/ tube	

Packing Specifications



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Part of:



