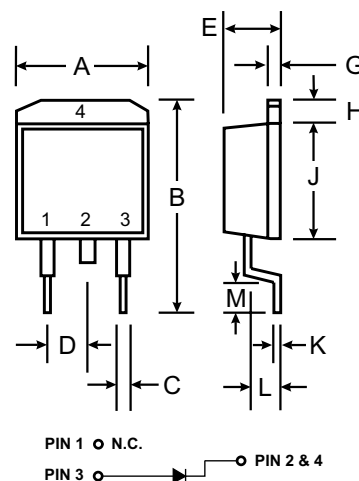


Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: D²PAK Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



D ² PAK		
Dim	Min	Max
A	9.65	10.69
B	14.60	15.88
C	0.51	1.14
D	2.29	2.79
E	4.37	4.83
G	1.14	1.40
H	1.14	1.40
J	8.25	9.25
K	0.30	0.64
L	2.03	2.92
M	2.29	2.79
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	DBYL1025B	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Rectified Output Current @ T _C = 125°C	I_O	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100	A
Forward Voltage, per Element @ I _F = 10A, T _C = 25°C @ I _F = 10A, T _C = 125°C @ I _F = 20A, T _C = 125°C	V_{FM}	0.45 0.37 0.53	V
Peak Reverse Current at Rated DC Blocking Voltage @ T _C = 25°C @ T _C = 125°C	I_{RM}	5.0 500	mA
Typical Junction Capacitance (Note 2)	C_j	350	pF
Typical Thermal Resistance Junction to Case (Note 1)	$R_{\theta JC}$	6.0	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

- Notes:
1. Thermal resistance: junction to case mounted on heat sink.
 2. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.

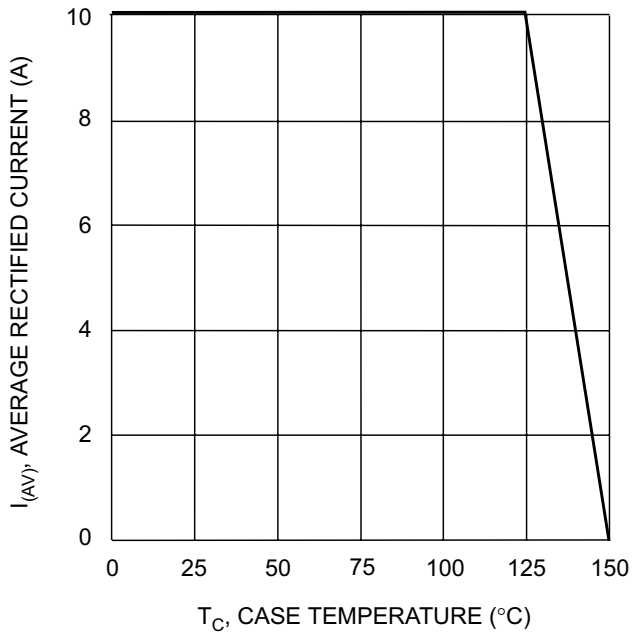


Fig. 1 Forward Derating Curve

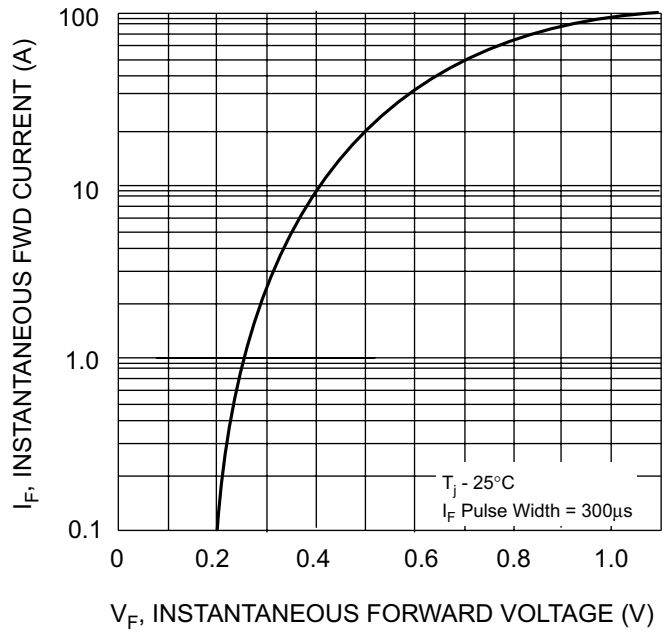


Fig. 2 Typical Forward Characteristics

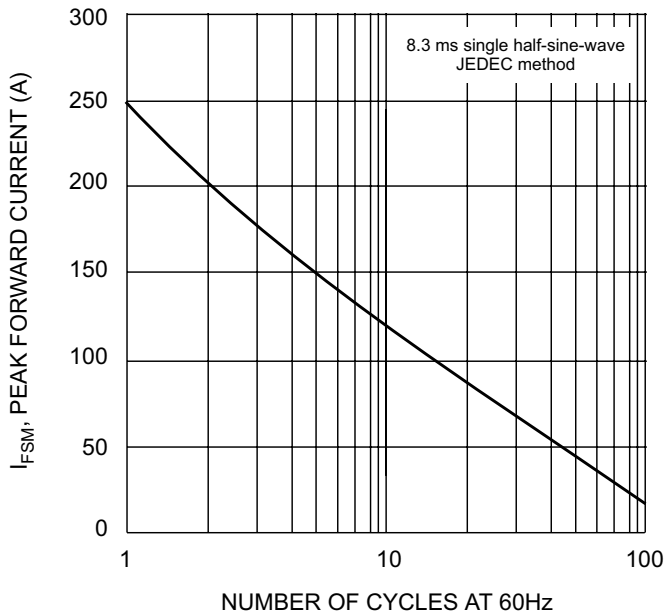


Fig. 3 Maximum Non-Repetitive Surge Current

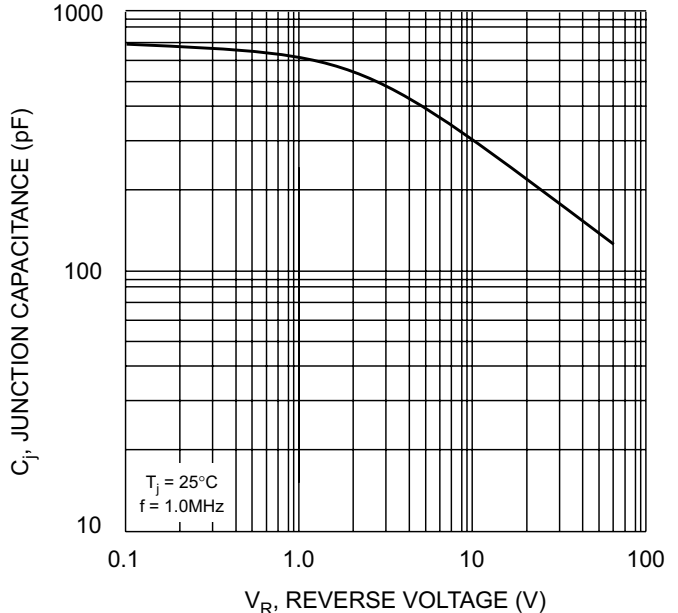


Fig. 4 Typical Junction Capacitance