



1.0A Schottky rectifier

Features

- 1. Low power loss, high efficiency
- 2. High current capability
- 3. Low forward voltage
- 4. Plastic material – UL recognition flammability classification 94V – 0

Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection



Absolute Maximum Ratings

T_j=25°C

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage =Working peak reverse voltage =DC blocking voltage		1N5817	V _{RRM}	20	V
		1N5818	= V _{RWM}	30	V
		1N5819	= V _R	40	V
Peak forward surge current			I _{FSM}	25	A
Average forward current	T _A =75°C		I _{FAV}	1	A
Storage temperature range			T _{stg}	-65~+150	°C

Electrical Characteristics

T_j=25°C

Parameter	Test Conditions	Type	Symbol	Typ.	Max.	Unit
Forward voltage	I _F =1A	1N5817	V _F		0.450	V
	I _F =3A		V _F		0.750	V
	I _F =1A	1N5818	V _F		0.550	V
	I _F =3A		V _F		0.875	V
	I _F =1A	1N5819	V _F		0.600	V
	I _F =3A		V _F		0.900	V
Maximum DC average reverse Current at DC blocking voltage	T _A =25°C	I _R			1	mA
	T _A =100°C				10	mA
Diode capacitance	V _R =4V, f=1MHz	C _J		110		pF



Characteristics ($T_j=25^\circ\text{C}$ unless otherwise specified)

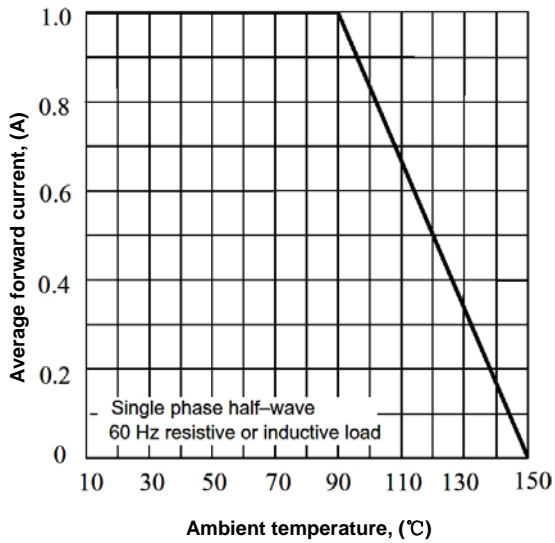


Figure 1. Max. average forward current vs. ambient temperature

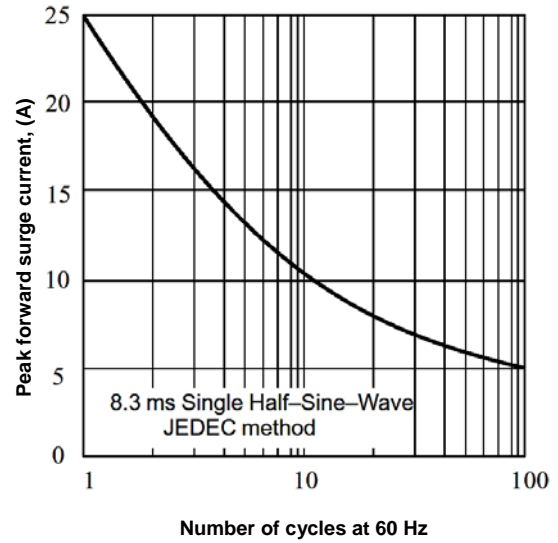


Figure 2. Max. peak forward surge current vs. number of cycles

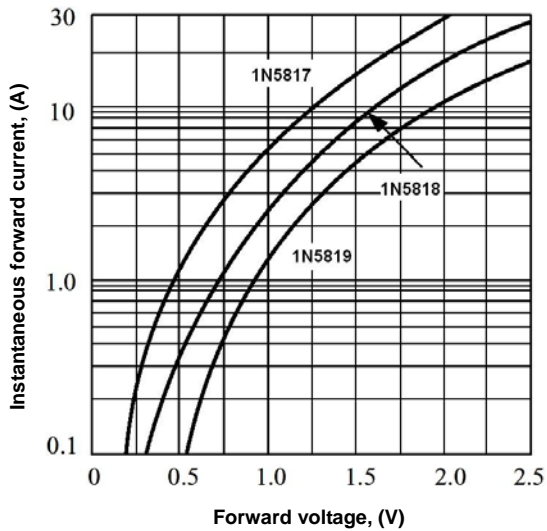


Figure 3. Typical forward current vs. forward voltage

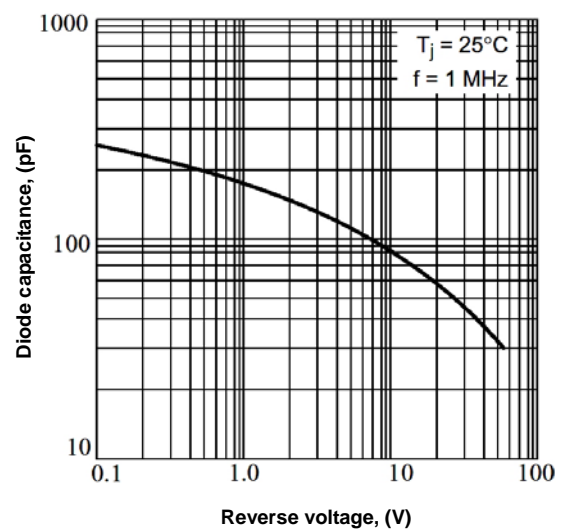
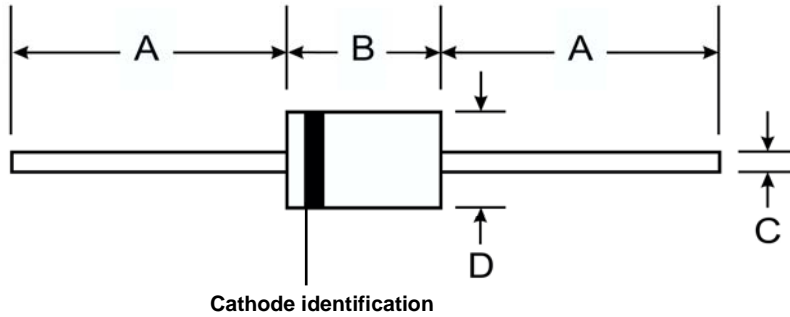


Figure 4. Typical diode capacitance vs. reverse voltage



Dimensions in mm



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	1.000	---	25.40	---
B	0.166	0.205	4.10	5.20
C	0.028	0.034	0.70	0.90
D	0.080	0.107	2.00	2.70

Case: molded plastic DO-41

Polarity: cathode band

Marking: type number

Marking

