



# 1.0A Schottky Barrier Rectifiers

## Features

1. High surge capability
2. Low power loss, high efficiency
3. High current capability and low forward voltage drop
4. For use in low voltage, high frequency inverters, free wheeling, and polarity protection application



## Absolute Maximum Ratings & Electrical Characteristics

$T_j=25^{\circ}\text{C}$

Characteristic	Symbol	SR102	SR103	SR104	SR105	SR106	Unit
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS voltage	$V_{RSM}$	14	21	28	35	42	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	V
Maximum average forward rectified Current @ lead temperature(TL) @ $T_L=75^{\circ}\text{C}$	$I_{(AV)}$	1.0			---		A
Measured 9.5mm lead length @ $T_L=100^{\circ}\text{C}$		---			1.0		
Peak forward surge current 8.3ms half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25					A
Maximum forward voltage @1.0A	$V_F$	0.55		0.60		0.70	V
Maximum average reverse current @ $T_A=25^{\circ}\text{C}$	$I_R$	1.0					mA
at peak reverse voltage @ $T_A=100^{\circ}\text{C}$	$I_R$	10					
Typical total capacitance	$C_T$	110			80		pF
Storage and operating temperature range	$T_J, T_{STG}$	-65 to +150					$^{\circ}\text{C}$



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

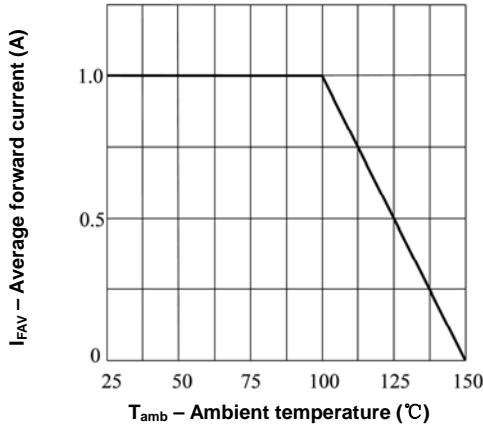


Figure 1. Max. Average forward current vs. ambient temperature

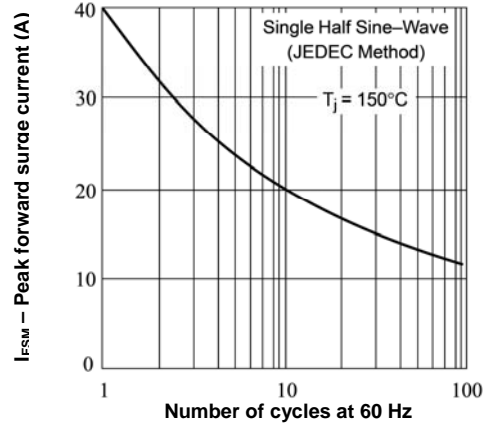


Figure 2. Max. Peak forward surge current vs. Number of cycles

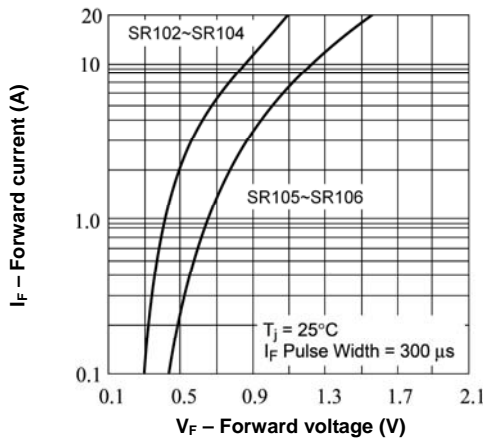


Figure 3. Typ. forward current vs. forward voltage

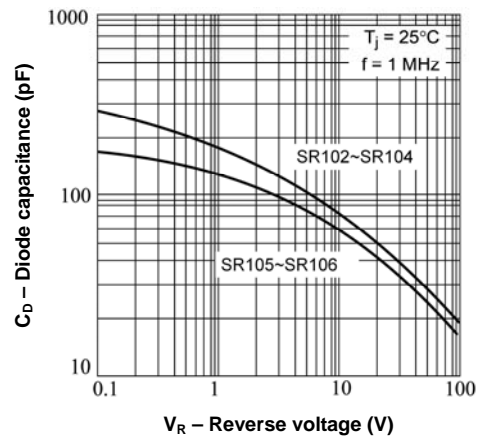


Figure 4. Typ. diode capacitance vs. reverse voltage

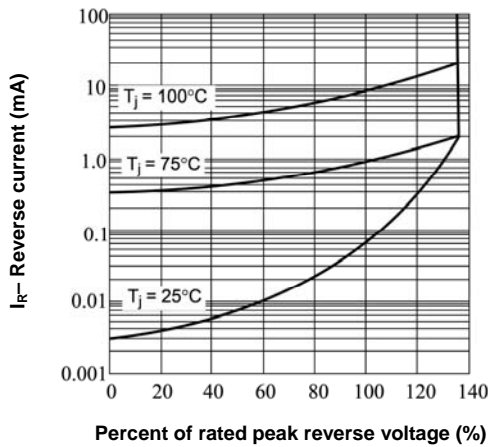
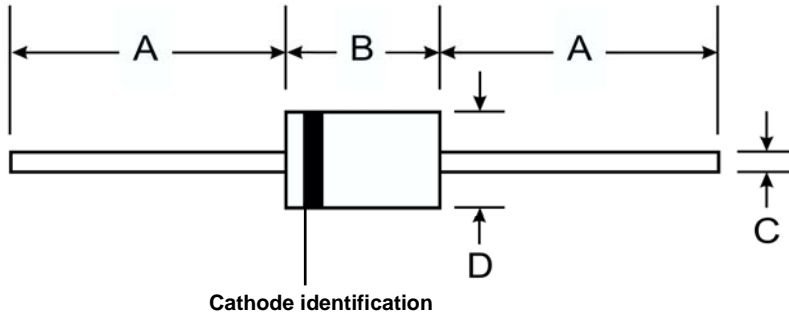


Figure 5. Typ. reverse current vs. percent of rated peak reverse voltage

Excel Semiconductor



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

