

CSP16C04/CSB16C04

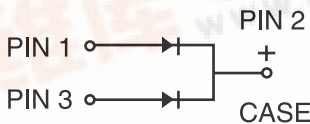


PRELIMINARY

16 AMPS. SCHOTTKY BARRIER RECTIFIERS

FEATURES

- Metal of silicon rectifier , major carrier conduction
- Low power loss. high efficient
- High current capability, low V_F



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

($T_C=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Maximum Recurrent Peak Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current at $T_C=95^{\circ}\text{C}$	$I_{F(AV)}$	16	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250	A
Maximum Forward Voltage ^a $I_F=8\text{A}$, $T_C=25^{\circ}\text{C}$	V_F	0.62	V
Maximum Reverse Current at Peak Reverse Voltage ^a	I_R	0.5	mA
Typical Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	3	$^{\circ}\text{C/W}$
Typical Junction Capacitance, $V_R=4\text{V}$	C_J	700	pF
Maximum Operating Junction Temperature	T_J	-65 to 125	$^{\circ}\text{C}$
Maximum Storage Temperature	T_{STG}	-65 to 150	$^{\circ}\text{C}$

NOTE: a. Test Pulse Width 300us, Duty Cycle 2%

The information in this guide has been carefully checked and is believed to be reliable. However no responsibility can be assumed for inaccuracies that may not have been caught. All information in this guide is subject to change without prior notice. Furthermore CET cannot assume responsibility for the use of any license under the patent right of CET or any third parties. CET products are not authorized for use as critical components in life support devices or systems without express written approval of CET.



CSP16C04/CSB16C04

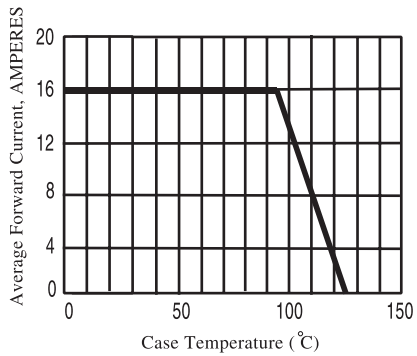


Figure 1. Forward Current Derating Curve

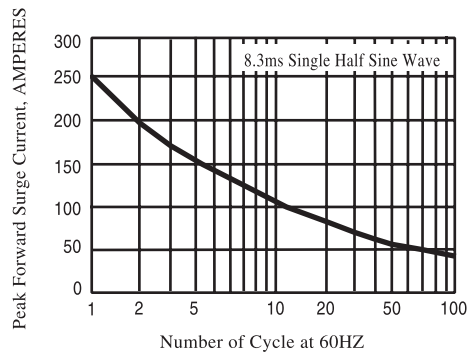


Figure 3. Maximum Non-Repetitive Surge Current

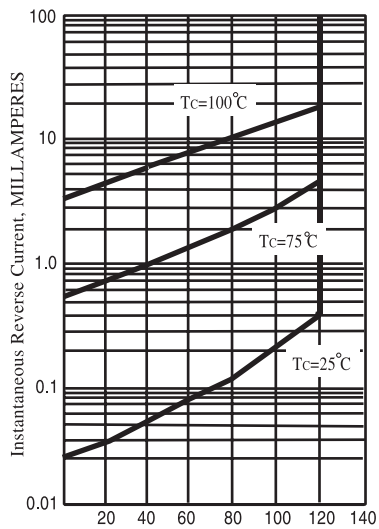


Figure 2. Typical Reverse Characteristics

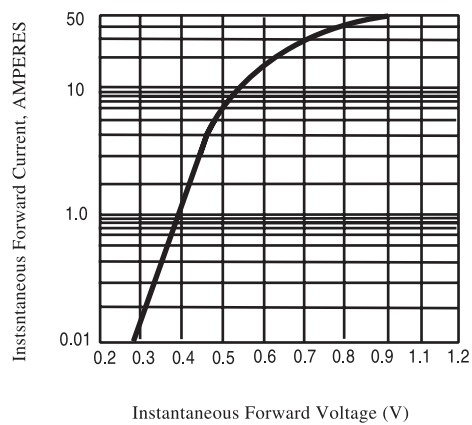


Figure 4. Typical Instantaneous Forward Characteristics

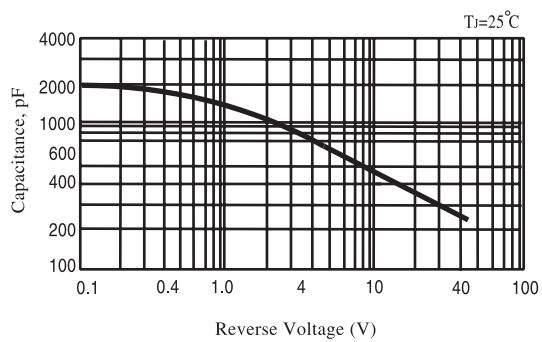


Figure 5. Typical Junction Capacitance