

CSP16C04/CSB16C04

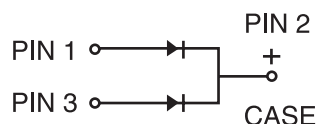


PRELIMINARY

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%

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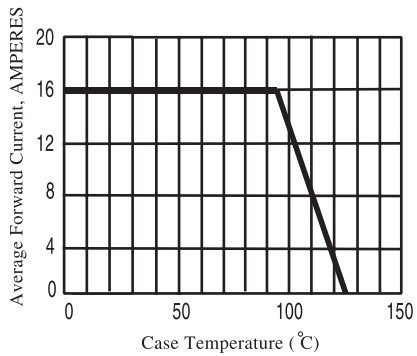


Figure 1. Forward Current Derating Curve

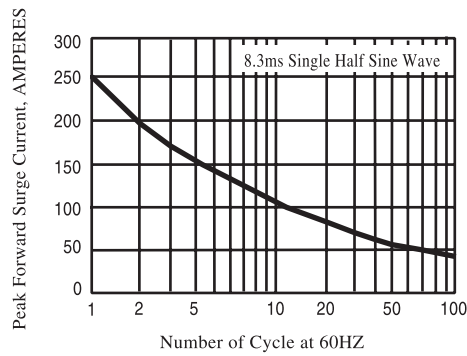


Figure 3. Maximum Non-Repetitive Surge Current

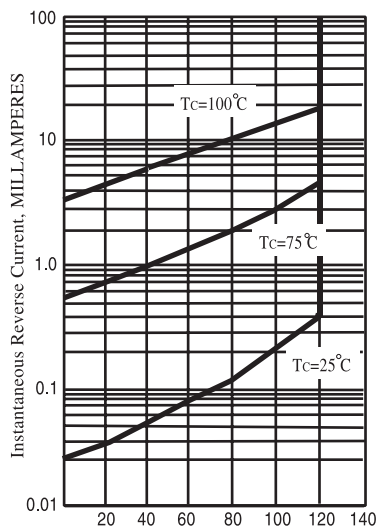


Figure 2. Typical Reverse Characteristics

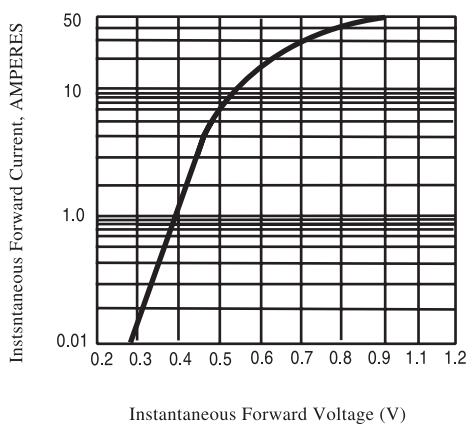


Figure 4. Typical Instantaneous Forward Characteristics

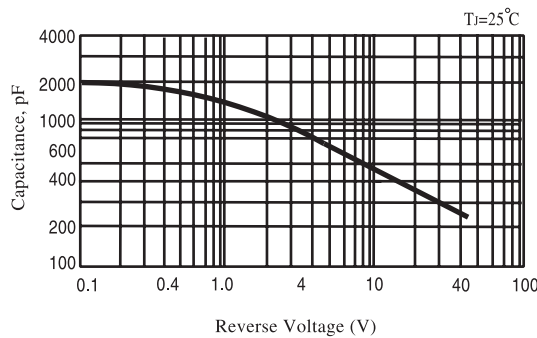


Figure 5. Typical Junction Capacitance