

Pb Free Plating Product

HBR1020CJR



10.0 Ampere Heatsink Tandem Polarity Schottky Half Bridge Rectifier

Features

- * Matured HMBR SKY technology
- * Internal ceramic insulated package outline
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Application

- * Inverters, Free Wheeling and Polarity Protection
- * High Frequency SMPS, Telecom SMPS and UPS
- * Car Audio Amplifiers and Sound Device Systems etc..

Mechanical Data

- * Case: Heatsink TO-220CS internal ceramic insulated
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202 method 208
- * Polarity: As marked on diode body
- * Mounting position: Any
- * Weight: 2.2 gram approximately

TO-220CS Unit:mm

$I_{F(AV)}$	10A
V_{RRM}	200V(2x100V)
T_j	175 °C
$V_F(max)$	0.70V (@ $T_j=125^\circ C$)

Series Tandem Polarity

ABSOLUTE RATINGS (Tc=25°C)

Symbol	Characteristics	Maximum Ratings	Unit
V_{RRM}	Repetitive Peak Reverse Voltage Per Device(2x100V) (Series Connection)	200	V
V_{DC}	Maximum DC Blocking Voltage Per Diode	100	V
$I_{(AV)}$	Maximum Average Forward Rectified Current @Tc=150°C	10	A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	200	A
V_F	Maximum Forward Voltage (Note 1)	@ $I_F=10A$ @ $T_J=25^\circ C$	0.85
		@ $I_F=10A$ @ $T_J=125^\circ C$	0.70
I_R	Maximum DC Reverse Current At Rated DC Blocking Voltage	@ $T_J=25^\circ C$	10
		@ $T_J=125^\circ C$	5
$R_{th(j-c)}$	Thermal Resistance from Junction to Case (Note 2)	1.9	°C/W
T_J	Operating Temperature Range	-55 to +175	°C
T_{STG}	Storage Temperature Range	-40 to +150	°C

NOTE: 1. 300us Pulse Width, Duty Cycle 2%.
 2. Thermal Resistance Junction To Case.
 Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.

ELECTRICAL CHARACTERISTICS (curves)

