

Schottky Barrier Rectifier

SB10U60D1-13

Base **FEATURES** cathode · Low Forward Voltage · High Operating Junction Temperature · Extremely low reverse leakage 62 Optimized VF vs. IR trade off for high efficiency 1 Cathode 3 DPAK Anode Anode Minimum Lot-to-Lot variations for robust device performance and reliable operation C 0.5 **APPLICATIONS** K С High frequency switching High efficiency SMPS Automotive D 30 ABSOLUTE MAXIMUM RATINGS(Ta=25℃) SYMBOL PARAMETER VALUE UNIT G H H Peak Repetitive Reverse Voltage VRRM 60 V DC Blocking Voltage V_R mm Average Rectified Forward Current DIM MIN MAX 10 А I_{F(AV)} 6.40 6.60 (Rated V_R) T_C= 135 ℃ Α 5.20 5.40 В Non-repetitive Peak Surge Current 1.15 1.35 C (Surge applied at rated load conditions half-140 А IFSM 5.70 6.10 D wave, single phase, 60Hz) F 0.65 G 0.75 ТJ -55~150 °C Junction Temperature 10 H 2 50 2.10 2.40 J 0.40 0.60 0.90 1.10 ĸ Storage Temperature Range -55~150 °C L Tstg 9.90 10.1 Q



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2	°C/W

$\textbf{ELECTRICAL CHARACTERISTICS} (Pulse Test: Pulse Width=300 us, Duty Cycle \leqslant 2\%)$

SYMBOL	PARAMETER	CONDITIONS	МАХ	UNIT
VF	Maximum Instantaneous Forward Voltage	I _F = 10A ; T _C = 25℃ I _F = 10A ; T _C = 125℃	0.52 0.50	V
IR	Maximum Instantaneous Reverse Current	VR=60V, Tc= 25℃ VR=60V, Tc= 125℃	0.4 70	mA

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