

Schottky Barrier Rectifier

DSS16-01A

FEATURES

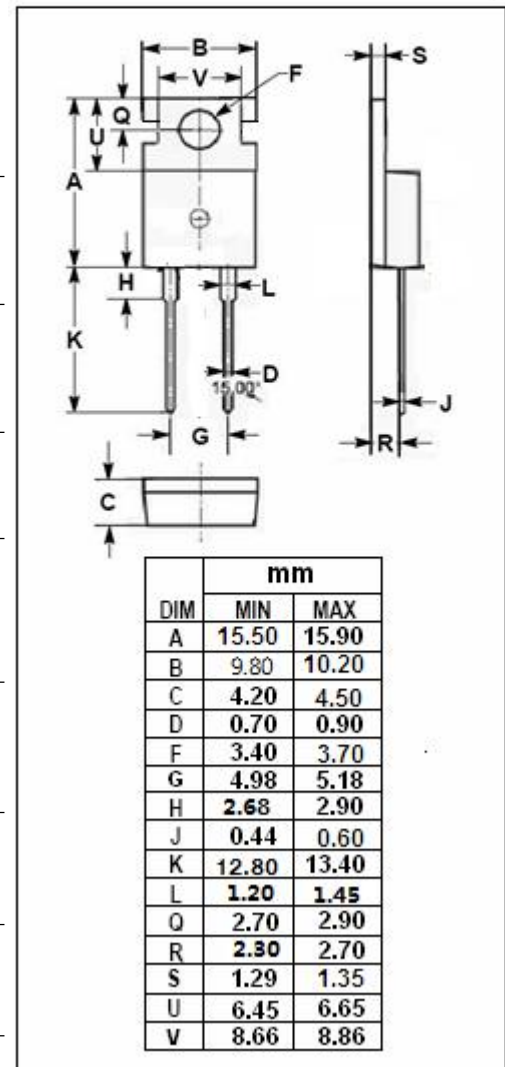
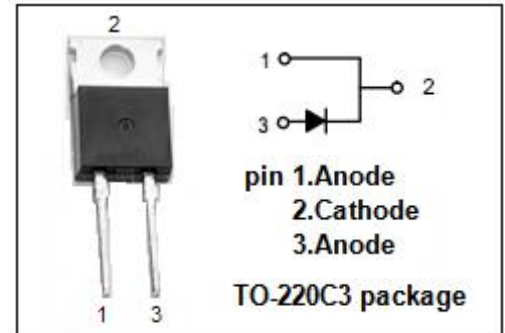
- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss high efficiency
- High Surge Capability, High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current (Rated V_R) $T_C=135^\circ\text{C}$	16	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 50Hz)	230	A
P_D	Total Dissipation @ $T_C=25^\circ\text{C}$	105	W
T_J	Junction Temperature	-55~175	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~175	$^\circ\text{C}$



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.4	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μs, Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 15A ; T _C = 25°C I _F = 15A ; T _C = 125°C I _F = 30A ; T _C = 125°C	0.79 0.64 0.76	V
I _R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 25°C Rated DC Voltage, T _C = 125°C	0.5 5	mA

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