

Features

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage Protection
- Isolated Hermetically Sealed Power Package
- Ceramic Seals for Improved Hermeticity
- Custom Lead Forming Available
- Eutectic Die Attach
- 150°C Operating Temperature
- Space Level Screening Available
- Available in TO-254Z Packaging

Maximum Ratings (per diode)

Peak Repetitive Reverse voltage	V_{RWM}	45 V
Working Peak Reverse Voltage	V_{RRM}	45 V
DC Blocking Voltage	V_R	45 V
Average Forward Current, 25 °C	I_O	15 A Note 1
Peak Surge Forward Current @ tp = 8.3 ms, half sinewave, $I_O = 0$; $V_{RM} = 0$	I_{FSM}	300 Apk
Peak Reverse Surge Current @ tp = 30μs, $V_{RSM} = 54$ V min, L = 260 μH	I_{RRM}	2 A
Thermal Resistance, Junction to Case	$R_{\theta jc}$	1.65 °C/W
Thermal Resistance, Junction to Ambient	$R_{\theta ja}$	40°C/W
Operating Junction Temperature	T_J	-65°C to 150°C
Storage Temperature	T_{stg}	-65°C to 150°C

Electrical Characteristics per diode @ 25°C Unless Otherwise Specified

Parameter	Symbol	Typical	MA	Test Conditions
Maximum Instantaneous Forward Voltage	V_F		0.55V 0.75V 1.0V 0.80V	$I_F = 5$ A; $T_J = 25^\circ\text{C}^*$ $I_F = 15$ A; $T_J = 25^\circ\text{C}^*$ $I_F = 30$ A; $T_J = 25^\circ\text{C}^*$ $I_F = 15$ A; $T_J = -55^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	50 μA	1 mA 40 mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Junction Capacitance	C_j		2000 pF	$V_R = 5$ V, $f = 1$ MHz

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Note:

1. Derate linearly @ 300mA/°C from $T_J = T_C = +100^\circ\text{C}$ to 150°C

1N6660
1N6660R
MIL -S-19500/608

30 Amp / 45 VOLTS
COMMON CATHODE
OR
COMMON ANODE
SCHOTTKY RECTIFIER

TO-254

