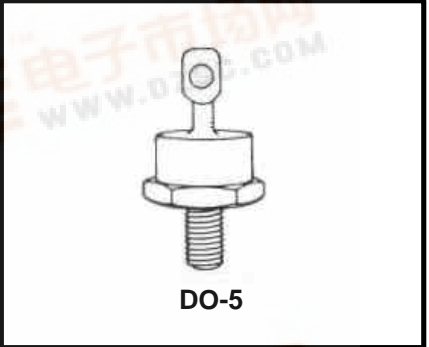




580 Pleasant St.
Watertown, MA 02472
PH: (617) 926-0404
FAX: (617) 924-1235

**USD520
USD535
USD545**

**150 Amp Pk,
Up to 45V
POWER SCHOTTKY
RECTIFIERS**



Features:

- Very Low Forward Voltage (0.6V at 60A, 125°C)
- Low Recovered Charge
- Rugged Package Design (DO-5)
- High Efficiency for Low Voltage Supplies
- Low Thermal Resistance (1.0°C/W)
- High Surge Current (1000A)
- Low Reverse Current (<50mA at rated V_R at 125°C)

Description:

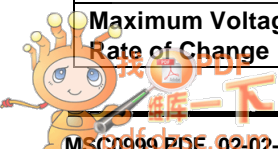
This series of Schottky barrier power rectifiers is ideally suited for output rectifiers and catch diodes in low voltage power supplies. The Microsemi high conductivity design, using a heavy copper top post and 4 point crimp, ensures cool thermal operation and low dynamic impedance. Rugged design absorbs stress that can damage glass-to-metal seal during installation and use.

Absolute Maximum Ratings:

	USD520	USD535	USD545
Working Peak Reverse Voltage, V_{RWM}	20V	35V	45V
DC Blocking Voltage, V_R	20V	35V	45V
Peak Repetitive Surge Voltage, V_{RSM} @ I_{RM}	24V	42V	54V
Peak Repetitive Forward Current (Rated V_{R1} Square Wave, 20KHz, 50 percent Duty Cycle), I_{FRM}	150A (at $T_C = 115^\circ C$)	75A (at $T_C = 115^\circ C$)	1000A
Average Rectified Forward Current, $I_{F(AV)}$	75A (at $T_C = 115^\circ C$)	1000A	2A
Non-repetitive Peak Surge Current (8.3mS), I_{FSM}		2A	
Peak Reverse Transient Current, I_{RM}		-55° to +200°C	
Storage Temperature Range, T_{STG}		+175°C	
Operating Junction Temperature, T_j		1°C/W	
Thermal Resistance Junction-to-Case, $R_{\theta_{JC}}$			

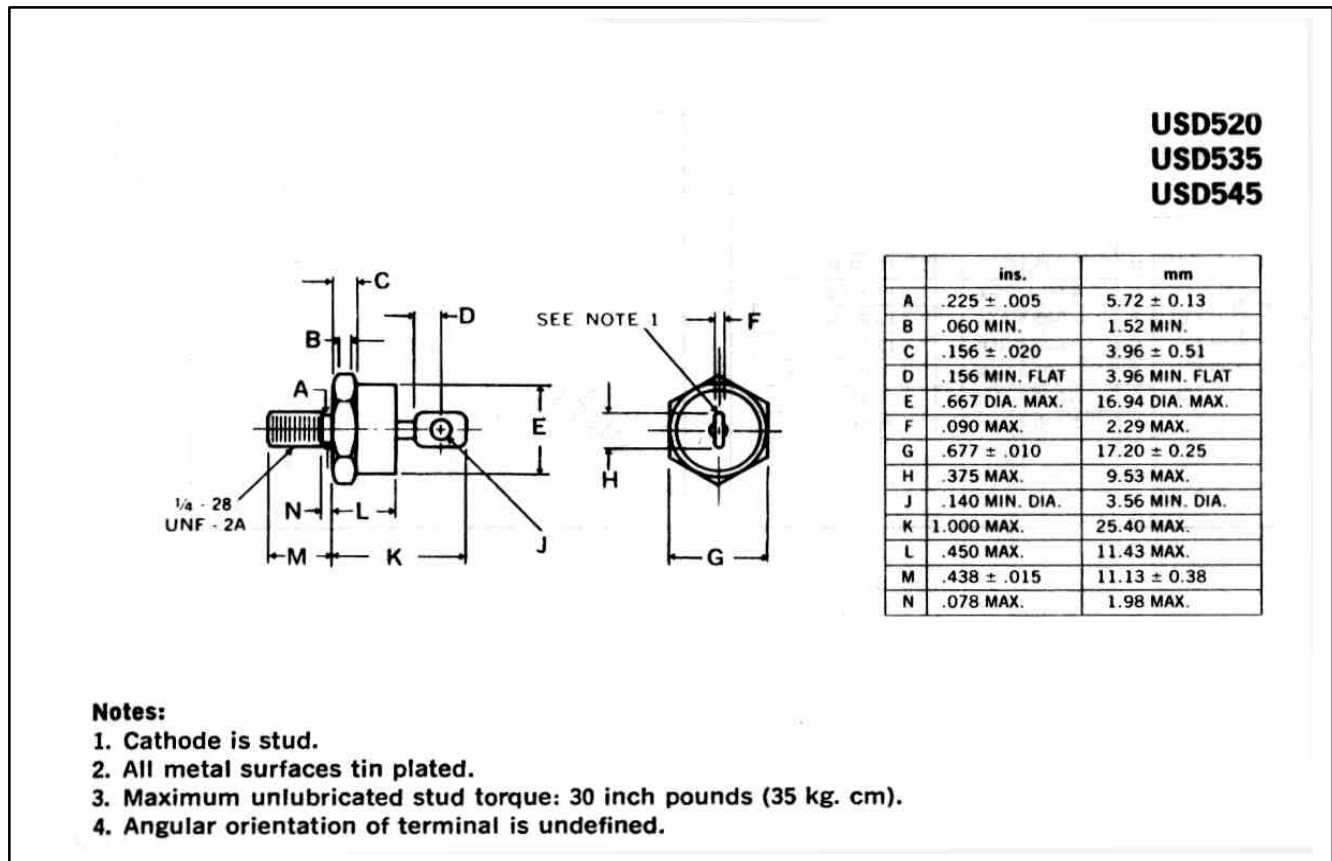
Electrical Characteristics ($T_{CASE} = 25^\circ C$)

Characteristic	Symbol	Limit	Units	Conditions
Maximum Instantaneous Reverse Current	i_R	20	mA	$V_R = V_{RWM}$ ($T_C = 125^\circ C$) Pulse Width = 300µs Duty Cycle = 1 percent
		(50)		
Maximum Instantaneous Forward Voltage	V_F	0.50	V	$i_F = 10A, T_C = 25^\circ C$ $i_F = 60A, T_C = 25^\circ C$ $i_F = 60A, T_C = 125^\circ C$
		0.68	V	
		0.60	V	
Maximum Capacitance	C_t	4000	pF	$V_R = 5.0V$
Maximum Voltage Rate of Change	dv/dt	1000	V/µS	$V_R = \text{rated}$



USD520
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 USD545

MECHANICAL SPECIFICATIONS:



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