TECHNICAL DATA DATA SHEET 4715, REV. -

# HERMETIC POWER SCHOTTKY RECTIFIER 175°C Maximum Operation Temperature

**DESCRIPTION:** A 45-VOLT, 7.5/15 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

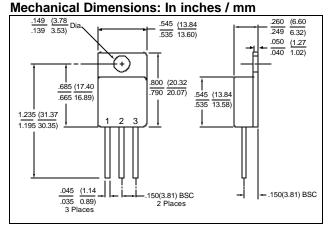
MAXIMUM RATINGS	ALL RATINGS ARE @ $T_c$ = 25 °C UNLESS OTHERWISE SPECIFIED.			
RATING		SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE		PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (@ T <sub>C</sub> =100 <sup>O</sup> C) (Single, Doubler)		lo	7.5	Amps
MAXIMUM DC OUTPUT CURRENT (@ T <sub>C</sub> =100 <sup>O</sup> C) (Common Cathode, Common Anode)		lo	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)		I <sub>FSM</sub>	140	Amps
MAXIMUM JUNCTION CAPACITANCE	(V <sub>r</sub> =5V)	C <sub>T</sub>	400	pF
MAXIMUM THERMAL RESISTANCE		$R_{ extsf{ heta}JC}$	1.36	°C/W
MAXIMUM OPERATING TEMPERATURE RANG	<u> </u>	Top/Tstg	-65 to + 175	°C
MAXIMUM STORAGE TEMPERATURE RANGE		Top/Tstg	-65 to + 175	°C

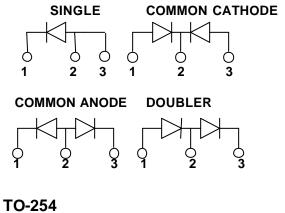
### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC		SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ( $I_f = 7.5 \text{ Ar}$	nps)			
T <sub>J</sub> ,	= 25 °C	V <sub>f</sub>	0.73	Volts
T	= 125 °C		0.66	
MAXIMUM REVERSE CURRENT (Ir @ 45 V PIV)				
T <sub>J</sub> ,	= 25 °C	l <sub>r</sub>	0.2	mA
T <sub>J</sub> :	= 125 °C		7.5	

## SENSITRON

#### TECHNICAL DATA DATASHEET 4715, REV. -





#### **PINOUT TABLE**

PINOUTTABLE				
ТҮРЕ	PIN 1	PIN 2	PIN 3	
SINGLE RECTIFIER	CATHODE	ANODE	ANODE	
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2	
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2	
DUAL RECTIFIER, DOUBLER (D)	ANODE	CATHODE/ ANODE	CATHODE	
Curves shown are for bare die only.	] [			
Typical Forward Characteristics		Typical Reverse Characteristics		
10 <sup>1</sup> (V) <sup>L</sup> - 175 °C 10 <sup>0</sup> 10 <sup>0</sup> 10 <sup>0</sup> 0.2 0.3 0.4 0.5 0.6 0.7 0 Forward Voltage Drop - ½(V)	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$ Instantaneous Reverse Current -1 $_{R}$ (mA) Instantaneous Reverse Current -1 $_{R}$ (mA) $_{0}$ $_{0}$ $_{1}$ $_{0}$ $_{1}$ $_{0}$ $_{1}$ $_{0}$ $_{1}$ $_{0}$ $_{1}$ $_{1}$ $_{0}$ $_{1}$ $_{$	175 °C 150 °C 100 °C		
	-11729-4681 • PHOP		42-9798 •	

World Wide Web Site - http://www.sensitron.com • E-mail Address - sales@sensitron.com •



#### **TECHNICAL DATA**

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