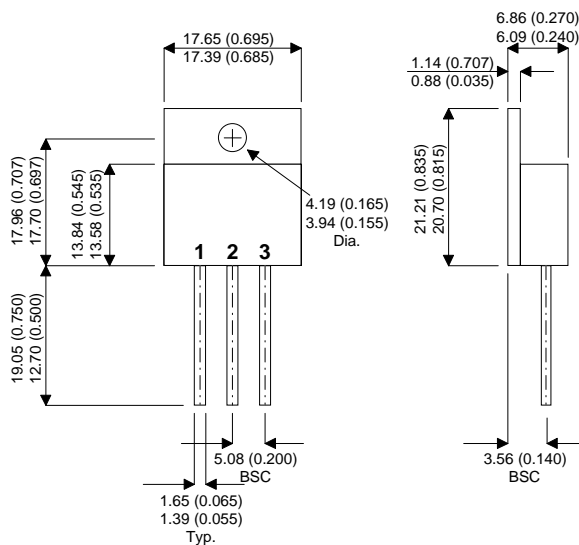


**MECHANICAL DATA**

Dimensions in mm

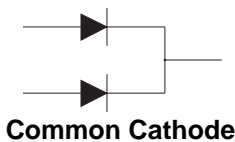


TO-258 Package Outline.  
Dimensions in mm (inches)

**DUAL SCHOTTKY  
BARRIER DIODE  
IN TO-258 HERMETIC METAL  
PACKAGE FOR HI-REL  
APPLICATIONS**

**FEATURES**

- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 45A
- LOW  $V_F$
- LOW LEAKAGE



1 = A<sub>1</sub> Anode 1  
2 = K Cathode  
3 = A<sub>2</sub> Anode 2

**ABSOLUTE MAXIMUM RATINGS** ( $T_{case} = 25^{\circ}C$  unless otherwise stated)

$V_{RRM}$	DC Reverse Voltage	100V
$V_{RSM}$	Peak Non-Repetitive Reverse Voltage	100V
$V_R$	Continuous Reverse Voltage	100V
$I_{F(AV)}$	Maximum Average Forward Current	45A*
$I_{FSM}$	Peak Non-Repetitive Surge Current at 50Hz (per leg)	400A
$T_{STG}$	Storage Temperature Range	-55°C to 150°C
$T_J$	Maximum Operating Junction Temperature	-55°C to 150°C

\*  $I_{F(AV)}$  current is limited by pin diameter

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

## ELECTRICAL CHARACTERISTICS (T<sub>CASE</sub> = 25°C unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
V <sub>R</sub>	Max. DC Reverse Voltage					100	V
V <sub>RWM</sub>	Max. Working Peak Reverse Voltage					100	
I <sub>F(AV)</sub>	Average Forward Current	50% Duty Cycle	T <sub>C</sub> =100°C			45	A
I <sub>FSM</sub>	Peak Non-Repetitive Surge Current	T <sub>p</sub> =8.3ms Half Sine				400	
V <sub>FM</sub>	Forward Voltage Drop (Per Leg)	I <sub>F</sub> =25A	T <sub>J</sub> = 25°C			0.89	V
		I <sub>F</sub> =45A	T <sub>J</sub> = 25°C			1.13	
		I <sub>F</sub> =25A	T <sub>J</sub> = 125°C			0.74	
		I <sub>F</sub> =45A	T <sub>J</sub> = 125°C			0.97	
I <sub>RM</sub>	Reverse Leakage Current	V <sub>R</sub> = Rated V <sub>R</sub>	T <sub>J</sub> = 25°C			0.8	mA
			T <sub>J</sub> = 125°C			45	
C <sub>T</sub>	Junction Capacitance	V <sub>R</sub> = 5V <sub>DC</sub>	(1MHz, 25°C)			1400	pF
L <sub>S</sub>	Typical Series Inductance	(Anode Lead to Cathode Lead)				8.7	nH
R <sub>thJC</sub>	Thermal Resistance Junction to Case (Per Leg)	DC Operation				0.83	°C/W
R <sub>thJC</sub>	Thermal Resistance Junction to Case (Per Package)	DC Operation				0.42	

\*Pulse test tp=300µs δ≤2%