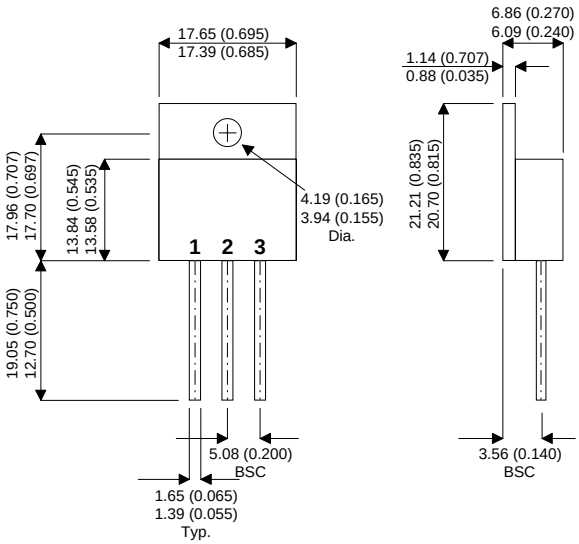
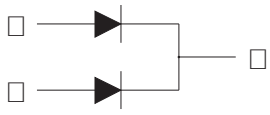
45CKQ100

MECHANICAL DATA
Dimensions in mm



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



Common Cathode

1 = A_1 Anode 1
2 = K Cathode
3 = A_2 Anode 2

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**

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°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.

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk

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ELECTRICAL CHARACTERISTICS (T_{CASE} = 25°C unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
V_R	Max. DC Reverse Voltage					100	V
V_{RWM}	Max. Working Peak Reverse Voltage					100	
$I_{F(AV)}$	Average Forward Current	50% Duty Cycle	T_C=100°C			45	A
I_{FSM}	Peak Non-Repetitive Surge Current	T_P=8.3ms Half Sine				400	
V_{FM}	Forward Voltage Drop (Per Leg)	I_F =25A	T_J= 25°C			0.89	V
		I_F =45A	T_J= 25°C			1.13	
		I_F =25A	T_J= 125°C			0.74	
		I_F =45A	T_J= 125°C			0.97	
I_{RM}	Reverse Leakage Current	V_R = Rated V_R	T_J= 25°C			0.8	mA
			T_J= 125°C			45	
C_T	Junction Capacitance	V_R = 5V_{DC}	(1MHz, 25°C)			1400	pF
L_S	Typical Series Inductance	(Anode Lead to Cathode Lead)				8.7	nH
R_{thJC}	Thermal Resistance Junction to Case (Per Leg)	DC Operation				0.83	°C/W
R_{thJC}	Thermal Resistance Junction to Case (Per Package)	DC Operation				0.42	

*Pulse test tp=300µs δ≤2%

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