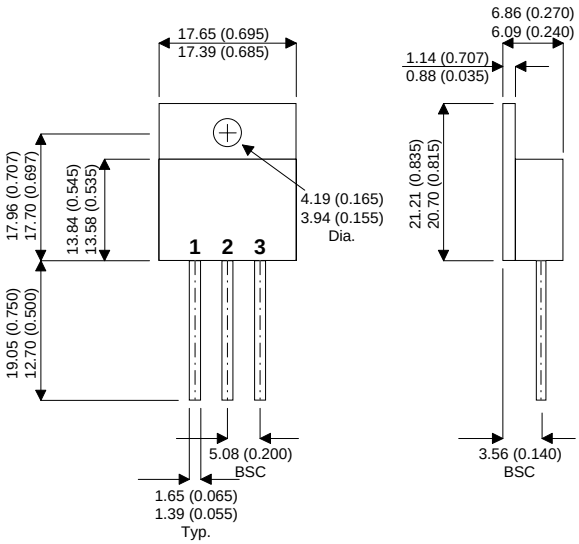
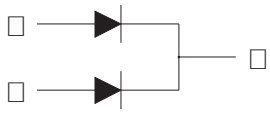
45CKQ100

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

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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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