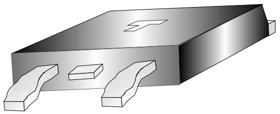
Transys Electronics LIMITED

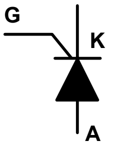
MCR716, MCR718 SERIES

Silicon Controlled Rectifier

V_{RRM} = 400- 600V, $I_{F(RMS)}$ = 4.0A



Case D-PAK Plastic



Symbol

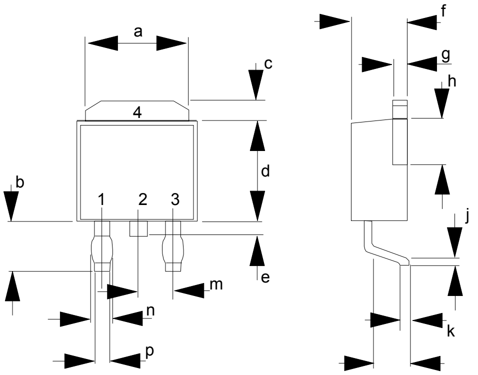
MAXIMUM RATINGS (Tj = 25 °C unless stated otherwise)				
Parameter	Symbol	MCR716	MCR718	Unit
Repetitive Peak Off-State Voltage	V_{RRM}	400	600	Volt
On-State RMS Current	$I_{T(RMS)}$	4.0 at tc = 90°C		Amp
Peak Non-Repetitive Surge Current	I_{TSM}	25		Amp
I^2T for Fusing 8.3ms	I^2T	2.6		A^2/S
Peak Reverse Gate Voltage	V_{GRM}	18		Volt
Peak Gate Current	I_{GM}	0.2		Amp
Forward Average Gate Power	$P_{G(AV)}$	0.1		Watt
Forward Peak Gate Power	P_{GM}	0.5		Watt
Maximum Storage Temperature Range	$T_{(STG)}$	-40 to +150		°C
Maximum Junction Temperature Range	Tj	-40 to +110		°C

ELECTRICAL CHARACTERISICS at Tj = 25° C Maximum. Unless stated Otherwise						
		Condition	Value			Unit
Parameter	Symbol		Min	Typ	Max	
Peak Forward On-State Voltage	V_{TM}	I_{TM} = 8.2 Amps		1.5	2.2	Volt
Repetitive Peak Reverse Current	I_{RRM}	$V_R = V_{RRM}$. t_j=110°C			200	µA
Gate Trigger Voltage	V_{GT}		0.30	0.55	0.80	Volt
Gate Trigger Current	I_{GT}		1.0	25	75	µA
Latch Current	I_L				5.0	mA
Holding Current	I_H		0.4	1.0	5.0	mA
Thermal Resistance (Junction to Case)	$R_{TH\ (J-c)}$				3.0	°C/W
Rate of Rise of Off-State Voltage	dV/dt		5.0	10		V/µS
Rate of Rise of Off-State Current	dA/dt				100	A/µS

Mechanical Dimensions

DIMENSIONS				
	Millimetres		Inches	
Dim	Min	Max	Min	Max
a	6.35	6.73	0.250	0.265
b	2.60	2.89	0.102	0.114
c	0.77	1.27	0..030	0.050
d	5.97	6.35	0.235	0.25
e	0.51	1.27	0.020	0.050
f	2.19	2.38	0.086	0.094
g	0.84	1.01	0.033	0.040
h	3.51		0.138	
j	0.51		0.020	
k	0.46	0.580	0.018	0.023
m	2.29 Pitch		0.09 Pitch	
n	0.94	1.19	0.037	0.047
p	0.69	0.88	0.027	0.035

1 - Cathode
2 & 4 - Anode
3 - Gate



Case D-PAK Plastic