

# DIGITRON SEMICONDUCTORS

MR4422CTR

30A SCHOTTKY RECTIFIER

## MAXIMUM RATINGS

Rating	Symbol	MR4422CTR	Unit
Peak repetitive reverse voltage	$V_{RRM}$	100	V
Working peak reverse voltage	$V_{RWM}$		
DC blocking voltage	$V_R$		
Average rectified forward current (Rated $V_R$ )	$I_{F(AV)}$	30 @ $T_C = 125^\circ\text{C}$	A
Peak repetitive forward current (Rated $V_R$ , square wave, 20 kHz)	$I_{FRM}$	30 @ $T_C = 125^\circ\text{C}$	A
Peak repetitive reverse surge current (2.0 $\mu\text{s}$ , 1.0 kHz)	$I_{RRM}$	2	A
Non-repetitive peak surge current (surge applied at rated load conditions, halfwave, single phase, 60Hz)	$I_{FSM}$	400	A
Operating junction temperature range	$T_J$	-65 to +150	$^\circ\text{C}$
Storage junction temperature range	$T_{stg}$	-65 to +175	$^\circ\text{C}$
Maximum thermal resistance Junction to case	$R_{\theta JC}$	1.4	$^\circ\text{C}/\text{W}$

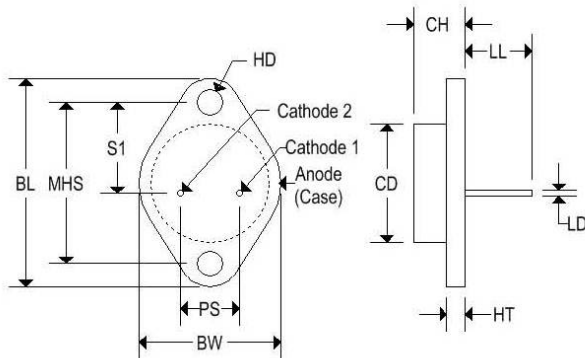
## ELECTRICAL CHARACTERISTICS ( $T_C = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	MR4422CTR	Unit
Maximum instantaneous forward voltage <sup>(1)</sup> ( $I_F = 15\text{A}$ , $T_C = 25^\circ\text{C}$ ) ( $I_F = 10\text{A}$ , $T_C = 125^\circ\text{C}$ )	$V_F$	1.2 1.1	V
Maximum instantaneous reverse current <sup>(1)</sup> (Rated dc voltage, $T_C = 25^\circ\text{C}$ ) (Rated dc voltage, $T_C = 125^\circ\text{C}$ )	$I_R$	1.0 250	mA

Note 1: Pulse test: Pulse width = 300 $\mu\text{s}$ , duty cycle  $\leq 2.0\%$ .

## MECHANICAL CHARACTERISTICS

Case	TO-3 Dual R
Marking	Alpha-numeric
Pin out	See below



	TO-3 Dual R			
	Inches		Millimeters	
	Min	Max	Min	Max
CD	-	0.875	-	22.220
CH	0.250	0.380	6.860	9.650
HT	0.060	0.135	1.520	3.430
BW	-	1.050	-	26.670
HD	0.131	0.188	3.330	4.780
LD	0.038	0.043	0.970	1.090
LL	0.312	0.500	7.920	12.700
BL	1.550 REF		39.370 REF	
MHS	1.177	1.197	29.900	30.400
PS	0.420	0.440	10.670	11.180
S1	0.655	0.675	16.640	17.150

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).  
Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.