

# DIGITRON SEMICONDUCTORS

MUR1630CT-MUR1660CT

16A SCHOTTKY RECTIFIER

## MAXIMUM RATINGS

Rating	Symbol	MUR			Unit
		1630CT	1640CT	1660CT	
Peak repetitive reverse voltage	$V_{RRM}$	300	400	600	V
Maximum RMS voltage	$V_{RMS}$	210	280	420	
DC blocking voltage	$V_R$	300	400	600	
Average rectified forward current (Rated $V_R$ )	$I_{F(AV)}$	16.0 @ $T_C = 100^\circ\text{C}$			A
Peak forward surge current (8.3ms, half sine)	$I_{FSM}$	125			A
Operating and storage junction temperature range	$T_J, T_{stg}$	-55 to +150			$^\circ\text{C}$

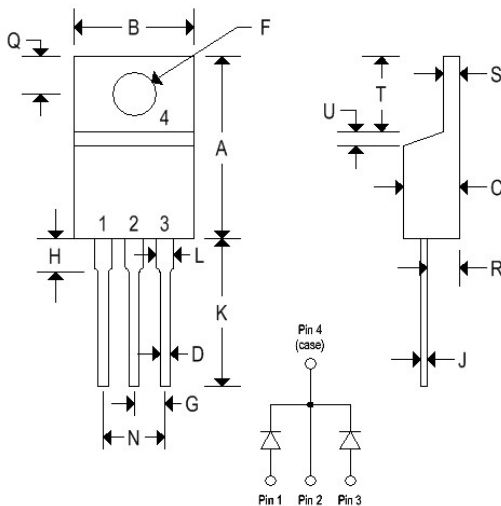
## ELECTRICAL CHARACTERISTICS (@ 25°C unless otherwise noted)

Parameter	Symbol	MUR			Unit
		1630CT	1640CT	1660CT	
Maximum forward voltage drop <sup>(1)</sup> ( $I_F = 8.0\text{A}, T_J = 25^\circ\text{C}$ )	$V_F$	1.30		1.50	V
Maximum DC reverse current <sup>(1)</sup> (Rated dc voltage, $T_J = 25^\circ\text{C}$ ) (Rated dc voltage, $T_J = 100^\circ\text{C}$ )	$I_R$	5.0 500			$\mu\text{A}$
Maximum reverse recovery time ( $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{REC} = 0.25\text{A}$ )	$t_{rr}$	50			ns
Typical junction capacitance @ 1.0MHz, $V_R = 4.0\text{V}$	$C_J$	80			pF

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

## MECHANICAL CHARACTERISTICS

Case	TO-220AB
Marking	Alpha-numeric
Pin out	See below



	TO-220AB			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.570	0.620	14.480	15.750
B	0.380	0.405	9.660	10.280
C	0.160	0.190	4.070	4.820
D	0.025	0.035	0.640	0.880
F	0.142	0.147	3.610	3.730
G	0.095	0.105	2.420	2.660
H	0.110	0.155	2.800	3.930
J	0.018	0.025	0.460	0.640
K	0.500	0.562	12.700	14.270
L	0.045	0.060	1.150	1.520
N	0.190	0.210	4.830	5.330
Q	0.100	0.120	2.540	3.040
R	0.080	0.110	2.040	2.790
S	0.045	0.055	1.150	1.390
T	0.235	0.255	5.970	6.470
U	-	0.050	-	1.270

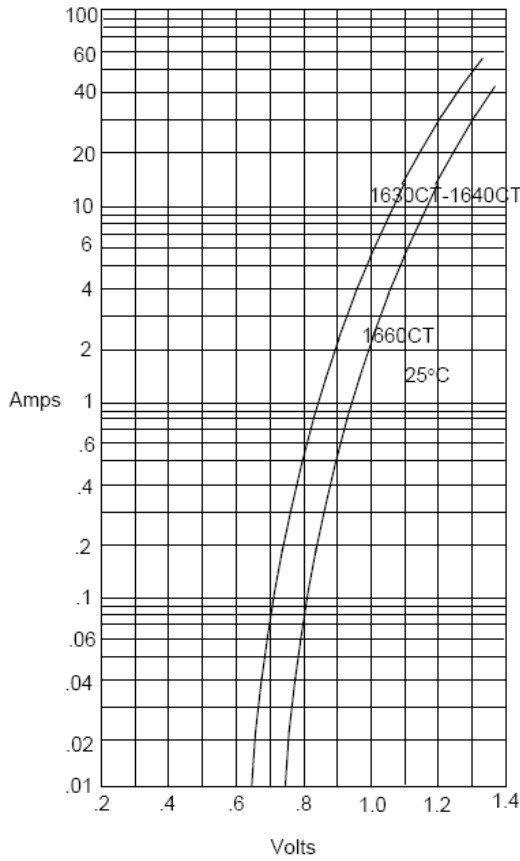
Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

# DIGITRON SEMICONDUCTORS

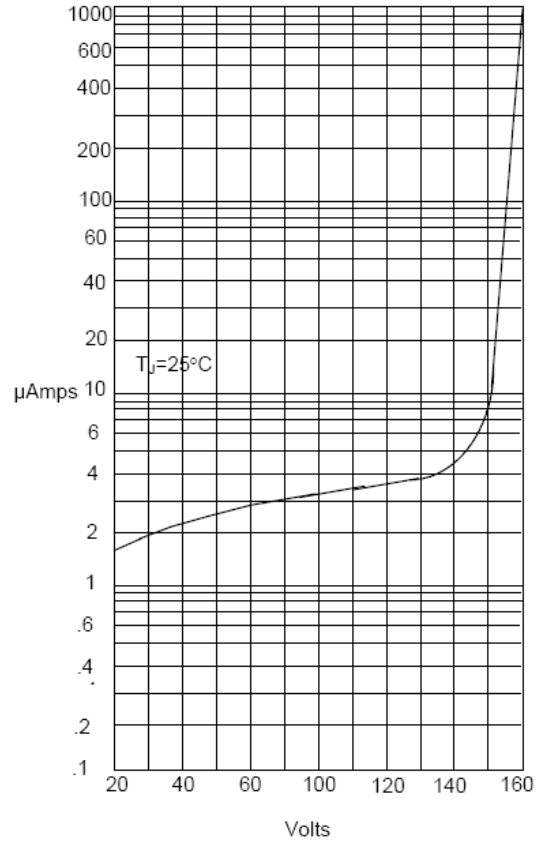
## MUR1630CT-MUR1660CT 16A SCHOTTKY RECTIFIER

Figure 1  
Typical Forward Characteristics



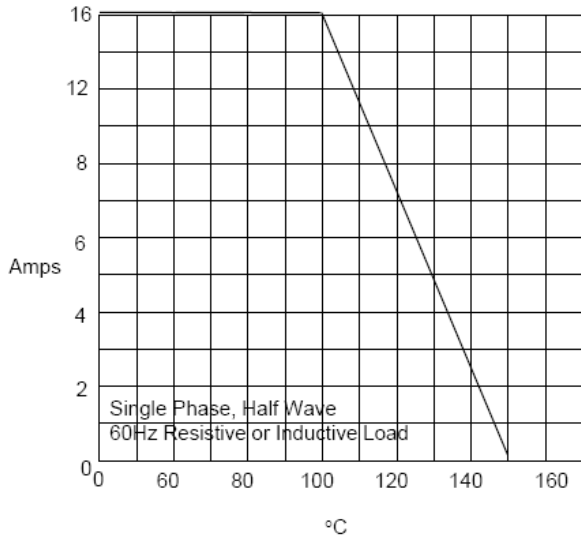
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



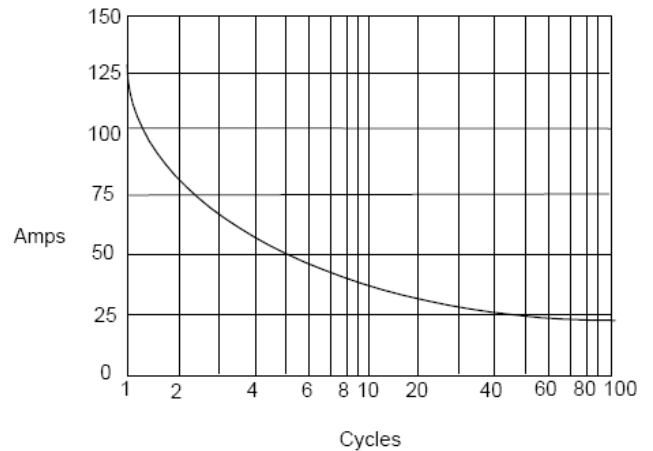
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Case Temperature - °C

Figure 4  
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles