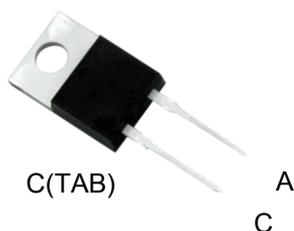


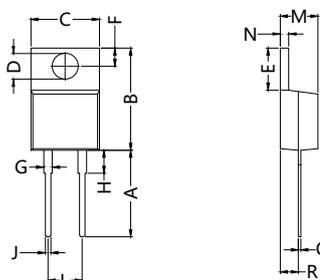
MUR1560

Ultra Fast Recovery Diodes



A=Anode, C=Cathode, TAB=Cathode

Dimensions TO-220AC



Dim.	Millimeter	
	Min.	Max.
A	12.70	13.97
B	14.73	16.00
C	9.91	10.66
ØD	3.54	4.08
E	5.85	6.85
F	2.54	3.18
G	1.15	1.65
H	2.79	5.84
J	0.64	1.01
L	5.05BSC	
M	4.32	4.82
N	1.14	1.39
Q	0.35	0.56
R	2.29	2.79



	V _{RSM} V	V _{RSM} V
MUR1560	600	600

Symbol	Test Conditions	Maximum Ratings	Unit
I_{FRMS}	T _{VJ} =T _{VJM}	24	A
I_{FAVM}	T _C =100°C; rectangular, d=0.5	15	
I_{FRM}	t _p <10µs; rep. rating, pulse width limited by T _{VJM}	140	
I_{FSM}	T _{VJ} =45°C	t=10ms (50Hz), sine t=8.3ms (60Hz), sine	A
	T _{VJ} =150°C	t=10ms(50Hz), sine t=8.3ms(60Hz), sine	
I²t	T _{VJ} =45°C	t=10ms (50Hz), sine t=8.3ms (60Hz), sine	A ² s
	T _{VJ} =150°C	t=10ms(50Hz), sine t=8.3ms(60Hz), sine	
T_{VJ}		-40...+150	°C
T_{VJM}		150	
T_{stg}		-40...+150	
P_{tot}	T _C =25°C	61	W
M_d	Mounting torque	0.4...0.6	Nm
Weight		2	g



MUR1560

Ultra Fast Recovery Diodes

Symbol	Test Conditions	Characteristic Values		Unit
		typ.	max.	
I _R	T _{VJ} =25°C; V _R =V _{RRM}		50	uA
	T _{VJ} =25°C; V _R =0.8·V _{RRM}		25	uA
	T _{VJ} =125°C; V _R =0.8·V _{RRM}		3	mA
V _F	I _F =15A; T _{VJ} =150°C T _{VJ} =25°C	1.45	1.15 1.65	V
V _{TO}	For power-loss calculations only		1.12	V
r _T	T _{VJ} =T _{VJM}		23.2	mΩ
R _{thJC} R _{thCK} R _{thJA}		0.5	2 60	K/W
t _{rr}	I _F =1A; -di/dt=50A/us; V _R =30V; T _{VJ} =25°C	45	65	ns
I _{RM}	V _R =350V; I _F =15A; -di _F /dt=100A/us; L≤0.05uH; T _{VJ} =100°C	3.0	4.0	A

FEATURES

- * International standard package TO-220AC
- * Glass passivated chips
- * Very short recovery time
- * Extremely low switching losses
- * Low I_{RM}-values
- * Soft recovery behaviour
- * RoHS compliant

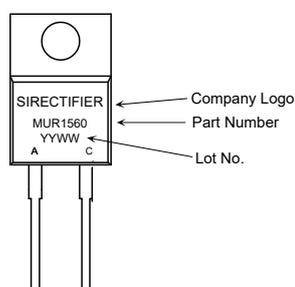
APPLICATIONS

- * Antiparallel diode for high frequency switching devices
- * Antisaturation diode
- * Snubber diode
- * Free wheeling diode in converters and motor control circuits
- * Rectifiers in switch mode power supplies (SMPS)
- * Inductive heating and melting
- * Uninterruptible power supplies (UPS)
- * Ultrasonic cleaners and welders

ADVANTAGES

- * High reliability circuit operation
- * Low voltage peaks for reduced protection circuits
- * Low noise switching
- * Low losses
- * Operating at lower temperature or space saving by reduced cooling

Marking

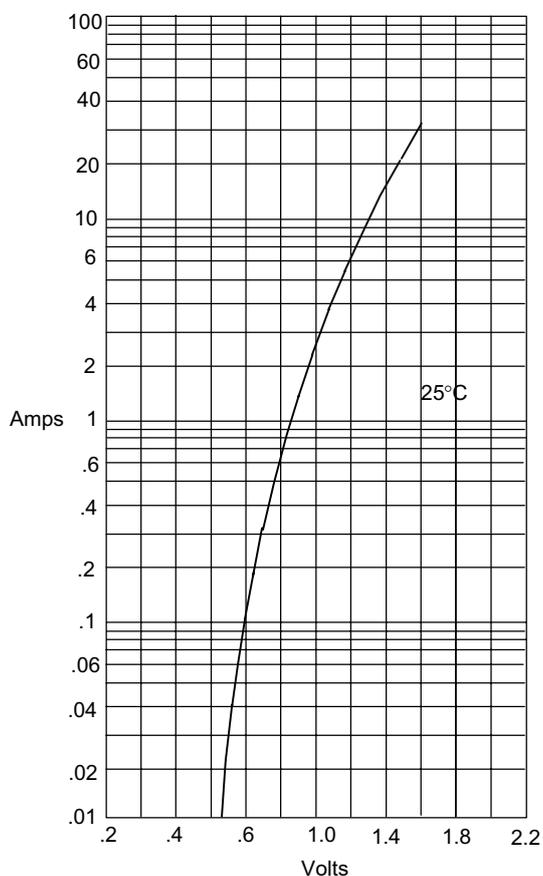


Ordering Information

Part Number	Package	Shipping	Marking Code
MUR1560	TO-220AC	50pcs / Tube	MUR1560

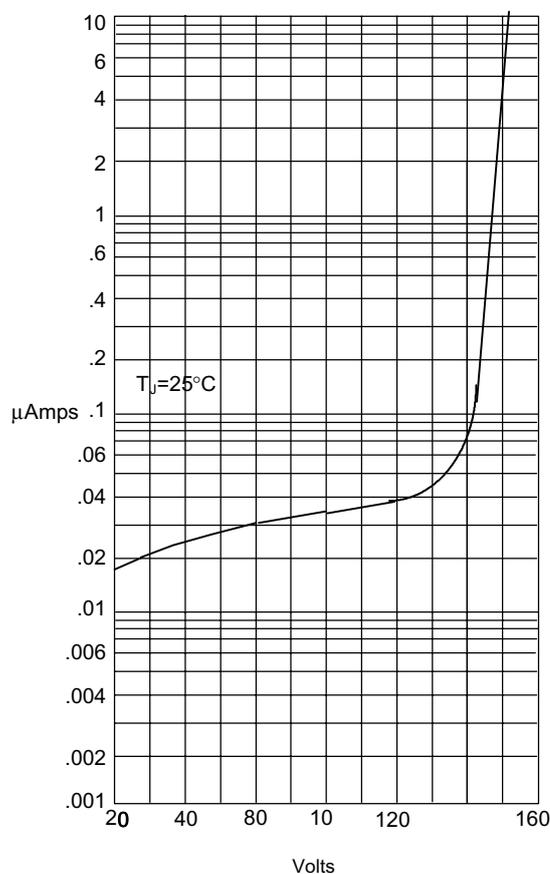
MUR1560

Ultra Fast Recovery Diodes



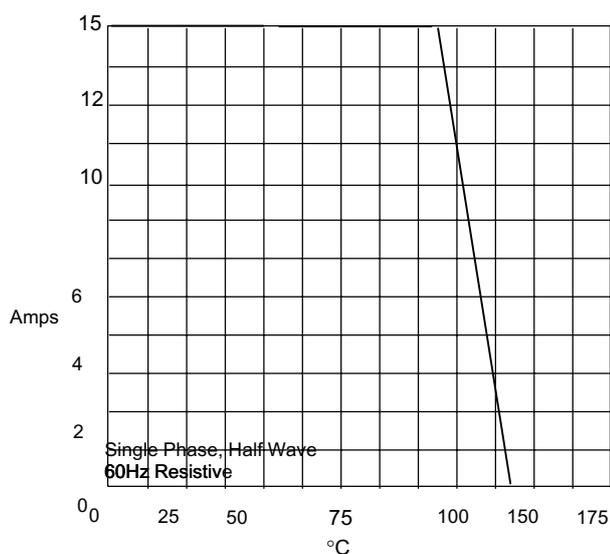
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 1 Typical Forward Characteristics



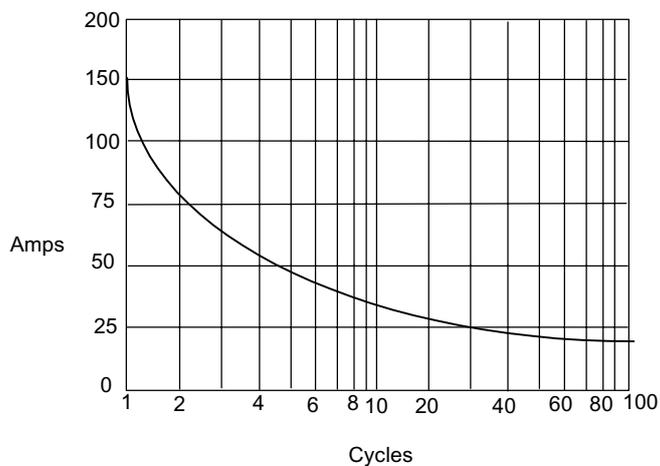
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 2 Typical Reverse Characteristics



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

Figure 3 Forward Derating Curve



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

Figure 4 Maximum Non-Repetitive Forward Surge Current