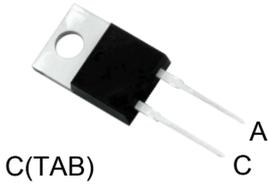


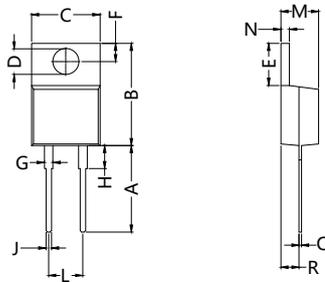
HUR820

Soft Recovery Behaviour High-Performance Wide Temperature Range Ultra Fast Recovery Epitaxial 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
∅D	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_{RRM} V
HUR820	200	200

Symbol	Test Conditions	Maximum Ratings	Unit
I_{FRMS} I_{FAVM}	$T_C=150^{\circ}C$; rectangular, $d=0.5$	35 8	A
I_{FSM}	$T_{VJ}=45^{\circ}C$; $t_p=10ms$ (50Hz), sine	80	A
E_{AS}	$T_{VJ}=25^{\circ}C$; non-repetitive; $I_{AS}=2A$; $L=180\mu H$	0.5	mJ
I_{AR}	$V_A=1.5 \cdot V_R$ typ.; $f=10kHz$; repetitive	0.2	A
T_{VJ} T_{VJM} T_{stg}		-55...+175 175 -55...+150	$^{\circ}C$
P_{tot}	$T_C=25^{\circ}C$	60	W
M_d	mounting torque	0.4...0.6	Nm
Weight	typical	2	g



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Symbol	Test Conditions	Characteristic Values		Unit
		typ.	max.	
I_R	$T_{VJ}=25^{\circ}\text{C}; V_R=V_{RRM}$ $T_{VJ}=150^{\circ}\text{C}; V_R=V_{RRM}$		50 0.2	uA mA
V_F	$I_F=8\text{A}; T_{VJ}=150^{\circ}\text{C}$ $T_{VJ}=25^{\circ}\text{C}$		0.94 1.30	V
R_{thJC} R_{thCH}		0.5	2.5	K/W
t_{tr}	$I_F=1\text{A}; -di/dt=50\text{A}/\mu\text{s}; V_R=30\text{V}; T_{VJ}=25^{\circ}\text{C}$	25		ns
I_{RM}	$V_R=100\text{V}; I_F=10\text{A}; -di_F/dt=100\text{A}/\mu\text{s}; T_{VJ}=100^{\circ}\text{C}$		4.1	A

FEATURES

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

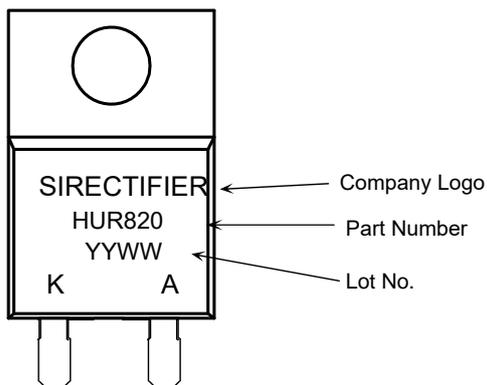
APPLICATIONS

- * 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
- * Uninterruptible power supplies (UPS)
- * Ultrasonic cleaners and welders

ADVANTAGES

- * Avalanche voltage rated for reliable operation
- * Soft reverse recovery for low EMI/RFI
- * Low I_{RM} reduces:
 - Power dissipation within the diode
 - Turn-on loss in the commutating switch

Marking



Ordering Information

Part Number	Package	Shipping	Marking Code
HUR820	TO-220AC	50pcs / Tube	HUR820