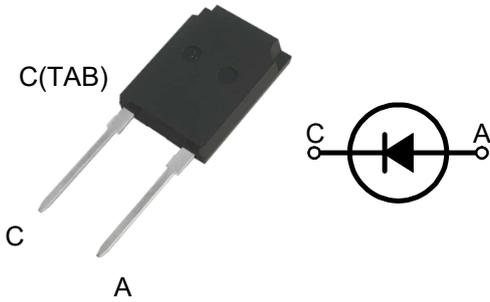
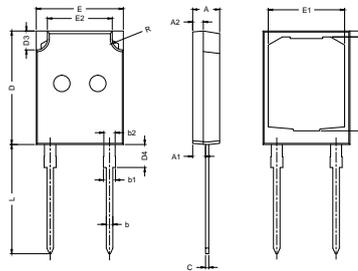


HUR20080B51

Soft Recovery Behaviour High-Performance Wide Temperature Range Ultra Fast Recovery Epitaxial Diodes



Dimensions TO-247P-2L



Dim.	Millimeter		Dim.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.85	5.10	D2	0.96	1.25
A1	2.31	2.51	D3	3.35	3.80
A2	1.85	2.10	D4	3.95	4.45
b	1.16	1.26	E	15.80	16.05
b1	/	2.25	E1	13.50	14.40
b2	1.96	2.15	E2	11.25	12.45
b3	/	3.25			
b4	2.96	3.15	e	5.44(BSC)	
c	0.59	0.66	L	19.80	20.25
D	20.85	21.10			
D1	17.15	17.75	R	1.90	2.10

A=Anode, C=Cathode, TAB=Cathode

	V_{RSM} V	V_{RRM} V
HUR20080B51	800	800

Symbol	Test Conditions	Maximum Ratings	Unit
I_{FRMS}	$T_{VJ}=T_{VJM}$	300	A
I_{FAVM}	$T_C=60^\circ\text{C}$; rectangular, $d=0.5$	200	
I_{FRM}	$t_p < 10\mu\text{s}$; rep. rating, pulse width limited by T_{VJM}	300	
I_{FSM}	$T_{VJ}=45^\circ\text{C}$	$t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	A
	$T_{VJ}=150^\circ\text{C}$	$t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	
I^2t	$T_{VJ}=45^\circ\text{C}$	$t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	A^2s
	$T_{VJ}=150^\circ\text{C}$	$t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	
T_{VJ} T_{VJM} T_{stg}		-40...+150 150 -40...+150	$^\circ\text{C}$
P_{tot}	$T_C=25^\circ\text{C}$	357	W
M_d	Mounting torque	0.8...1.2	Nm
Weight		6	g



Sirectifier®

HUR20080B51

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Symbol	Test Conditions	Characteristic Values		Unit
		typ.	max.	
I _R	T _{VJ} =25°C; V _R =V _{RRM}		3	uA
	T _{VJ} =25°C; V _R =0.8·V _{RRM}		1.5	uA
	T _{VJ} =125°C; V _R =0.8·V _{RRM}		20	mA
V _F	I _F =70A; T _{VJ} =150°C T _{VJ} =25°C		1.55 1.8	V
V _{TO}	For power-loss calculations only		1.2	V
r _T	T _{VJ} =T _{VJM}		4.6	mΩ
R _{thJC} R _{thCK} R _{thJA}		0.25	0.35 35	K/W
t _{tr}	I _F =1A; -di/dt=200A/us; V _R =30V; T _{VJ} =25°C	40	60	ns
I _{RM}	V _R =350V; I _F =75A; -di _F /dt=200A/us; L≤0.05uH; T _{VJ} =100°C	25	30	A

FEATURES

- * International standard package TO-247AC
- * Planar passivated chips
- * Very short recovery time
- * Extremely low switching losses
- * Low I_{RM}-values
- * Soft recovery behaviour
- * RoHS compliant

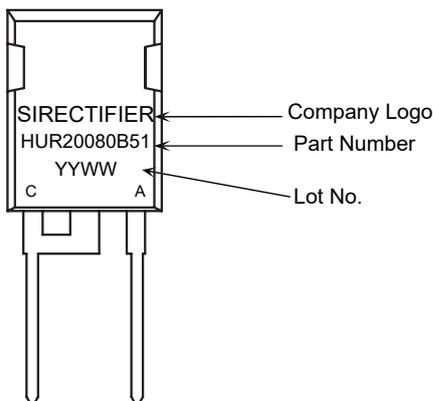
APPLICATIONS

- * 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
HUR20080B51	TO-247P-2L	30pcs / Tube	HUR20080B51

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