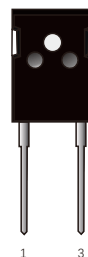


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ultrafast Recovery Characteristics
- Low forward voltage drop
- Low Reverse Leakage Current
- Soft Recovery Characteristics
- High temperature soldering guaranteed:260°C/10 seconds,
- 0.25"(6.35mm)from case
- Component in accordance to RoHS 2015/863/EU



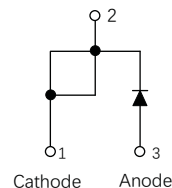
TO-247AC



MECHANICAL DATA

- Case: TO-247AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Base common cathode



TYPICAL APPLICATIONS

- Anti -Parallel Diode
 - Switching Power Supply
 - Inverters
- Free wheeling Diode
 - Motor Controller
 - Converters
 - Inverters
- PFC
- Snubber,Clamp diode

MAXIMUM RATINGS

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum average forward rectified current	$I_F(AV)$	30.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T_L)	I_{FSM}	300	A
Operating junction temperature range	T_J	-55 to+175	°C
Storage temperature range	T_{stg}	-55 to+175	°C

ELECTRICAL CHARACTERISTICS (T_J=25°C Unless otherwise noted)

Parameter	Test Conditions		Symbol	Min.	Typ.	Max.	Unit
Breakdown voltage Blocking voltage	IR=200μA		V_{BR} V_R	600	-	-	V
Instaneous forward voltage	Tj=25°C	IF=15.0A	V_F ¹⁾	-	1.50	-	V
		IF=30.0A		-	1.90	2.40	
	Tj=125°C	IF=15.0A		-	1.20	-	
		IF=30.0A		-	1.60	2.00	
Reverse current	Tj=25°C	VR=600V	I_R ²⁾	-	1	10	μA
	Tj=125°C			-	50	250	
Junction capacitance	4V,1MHz		Cj	-	121	-	pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Pulse test: pulse width≤40ms

DYNAMIC RECOVERY CHARACTERISTICS (T_J=25°C Unless otherwise noted)

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse recovery time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	-	30	40	ns

THERMAL CHARACTERISTICS

Parameter	Symbol	TO-247AC	Unit
Typical thermal resistance ³⁾	$R_{\theta jc}$	0.44 Typ. 0.90 MAX	°C/W

3.Thermal resistance from junction to case

AVAILABALE PACK INFORMATION

Product code	Pack	Box Size L×W×H(mm)	Quantity(pcs/box)	Carton SizeL×W×H(mm)	Quantity(box/carton)
MURS3060P-TO-247AC	P/T	530×110×60	360	550×330×130	5

FIG.1-FORWARD CURRENT DERATING CURVE

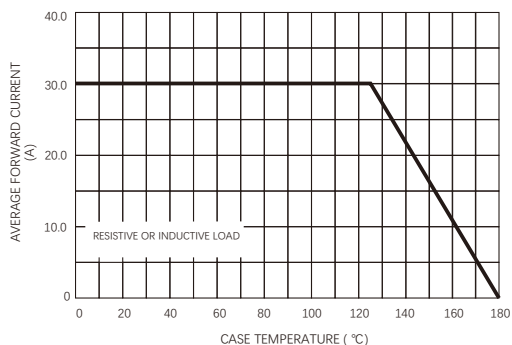


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

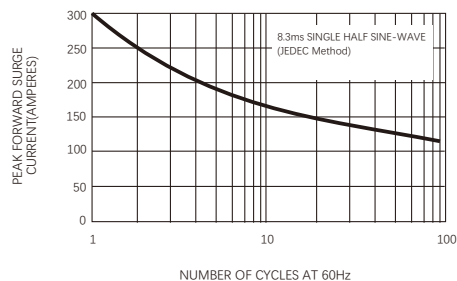


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

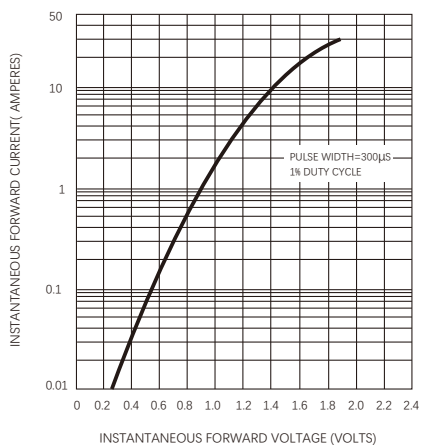


FIG.4-TYPICAL REVERSE CHARACTERISTICS

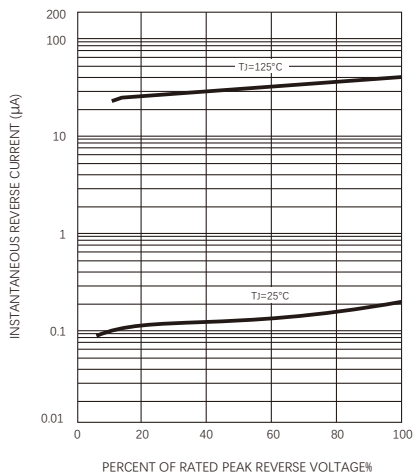
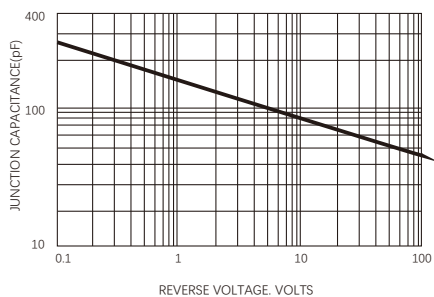
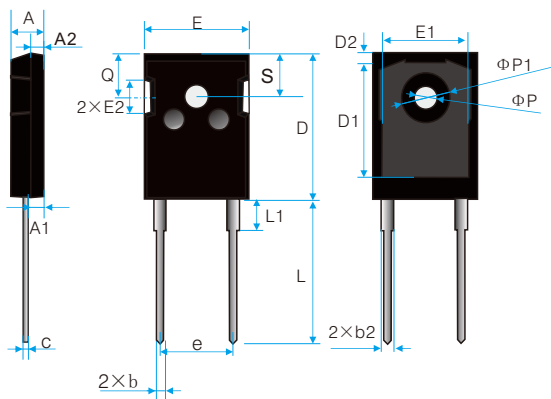


FIG.5-TYPICAL JUNCTION CAPACITANCE



TO-247AC



Symbol	millimeter		
	Min.	Typ.	MAX
A	4.70		5.30
A1	2.21		2.59
A2	1.50		2.49
D	20.30		20.70
E	15.48		16.24
E2	4.30		5.50
e		10.92	
L	19.80		20.30
L1	4.40		4.60
ΦP		3.50	
Q	5.38		6.19
S		6.14	
b	0.99		1.40
b2	1.65		2.39
b4	2.59		3.43
c	0.38		0.89
D1	13.07		
D2	0.51		1.35
E1	13.45		
ΦP1		7.20	
L2		2.10	

Friendship Reminder

- JiNan JingHeng (hereinafter referred to as JH) reserves the right to make changes to this document and its products and specifications at anytime without notice.
- Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.
- JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.
- No license is granted by implication or otherwise under any intellectual property rights of JH.
- JH's products are not authorized for use as critical components in life support devices or systems without express written approval of JH.