

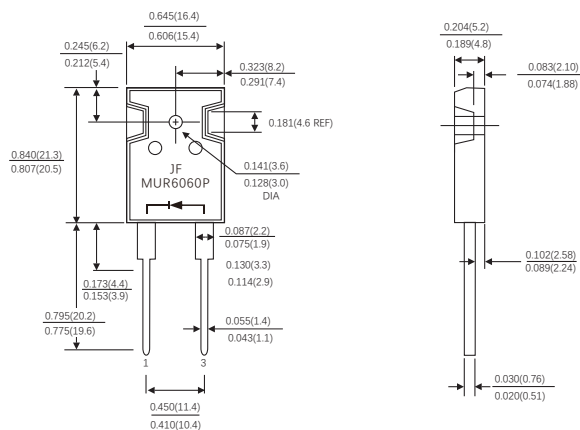
TO-247AC

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

MECHANICAL DATA

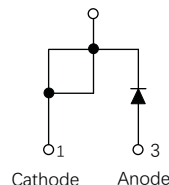
- Case: TO-247AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any



APPLICATIONS

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

Base common cathode



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	$I_{F(AV)}$	60.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T_J)	I_{FSM}	600	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	I _r =100μA		V _{BR} V _R	600	-	-	V
Instaneous forward voltage	T _J =25°C	I _F =60A	V _F ¹⁾	-	1.30	1.60	V
	T _J =125°C			-	1.15	-	
Reverse current	T _J =25°C	V _R =600V	I _R ²⁾	-	-	5	μA
	T _J =125°C			-	-	250	
Junction capacitance	V _R =4V, 1MHz		C _J	-	470	-	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		trr	-	48	70	ns
	T _J =25°C	I _F =30A dI _F /dt=200A/μS V _R =400V		-	106	-	
	T _J =125°C			-	150	-	
Peak recovery current	T _J =25°C	I _F =30A dI _F /dt=200A/μS V _R =400V	I _{RRM}	-	4.5	-	A
	T _J =125°C			-	7.5	-	
Reverse recovery charge	T _J =25°C	I _F =30A dI _F /dt=200A/μS V _R =400V	Q _{rr}	-	280	-	nC
	T _J =125°C			-	600	-	

THERMAL CHARACTERISTICS

Parameter	Symbol	TO-247AC	Unit
Typical thermal resistance ³⁾	$R_{\theta jc}$	0.50	$^{\circ}\text{C}/\text{W}$

3.Thermal resistance from junction to case

AVAILABLE PACK INFORMATION

Product code	Pack	Box Size L×W×H(mm)	Quantity(pcs/box)	Carton SizeL×W×H(mm)	Quantity(box/carton)
MUR6060P-TO-247AC	P/T	530×110×60	360	550×330×130	5

FIG.1-FORWARD CURRENT DERATING CURVE

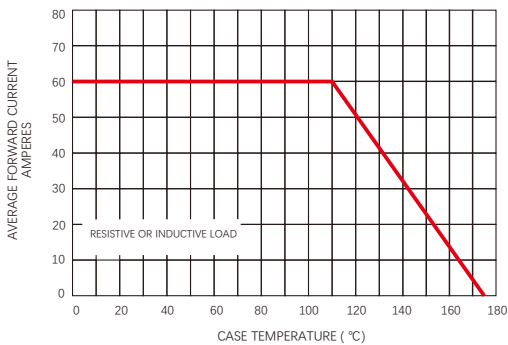


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

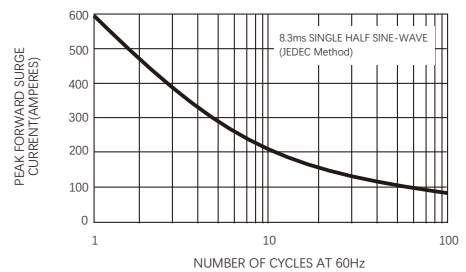


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

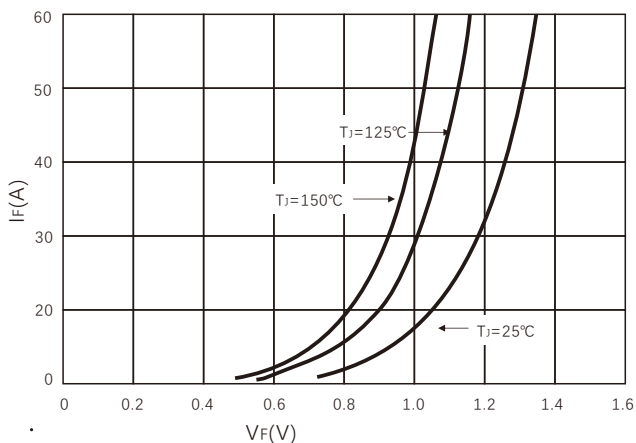


FIG.4-TYPICAL REVERSE CHARACTERISTICS

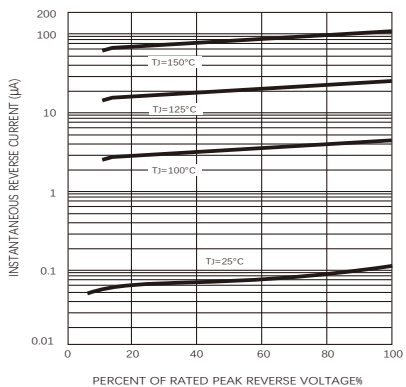
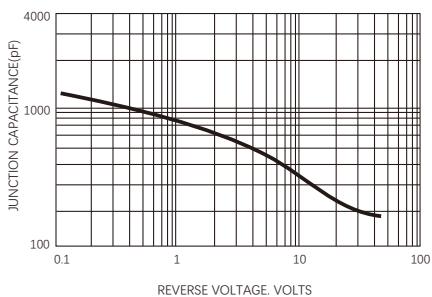


FIG.5-TYPICAL JUNCTION CAPACITANCE



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