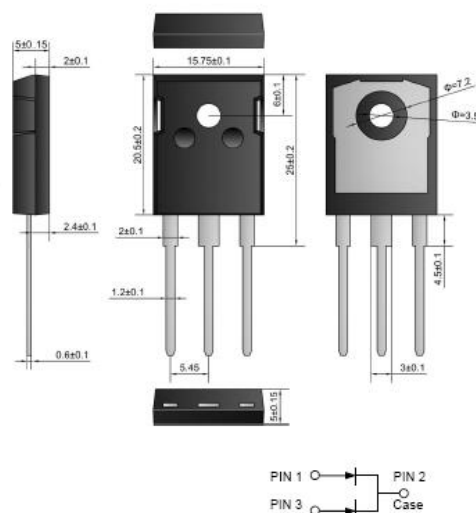


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Polyimide passivation
- Fast switching for high efficiency
- Low forward voltage drop
- Low Reverse Leakage Current
- High surge capability
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU

TO-247AB

Unit:mm



MECHANICAL DATA

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

MAXIMUM RATINGS

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

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	300	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}	350	A
Operating junction temperature range	T_J	-55 to+175	°C
Storage temperature range	T_{stg}	-55 to+175	°C

RATINGS AND CHARACTERISTIC OF MUR6030PT

ELECTRICAL CHARACTERISTICS (T_J=25℃ Unless otherwise noted)

Parameter	Test Conditions		Symbol	Min.	Typ.	Max.	Unit
Breakdown voltage Blocking voltage	I _R =200μA		V _{BR} V _R	300	—	—	V
Instaneous forward voltage	T _J =25℃	I _F =30A Per Leg	V _F ¹⁾	—	1.20	1.35	V
	T _J =125℃			—	1.05	—	
Reverse current	T _J =25℃	V _R =300V	I _R ²⁾	—	—	5	μA
	T _J =125℃			—	—	50	

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

2.Pulse test: pulse width≤40ms

DYNAMIC RECOVERY CHARACTERISTICS (T_J=25℃ 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}	—	35	45	ns

THERMAL CHARACTERISTICS

Parameter	Symbol	TO-247AB	Unit
Typical thermal resistance ³⁾	R _{θJC}	1.0	℃/W

3.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC OF MUR6030PT

FIG.1-FORWARD CURRENT DERATING CURVE

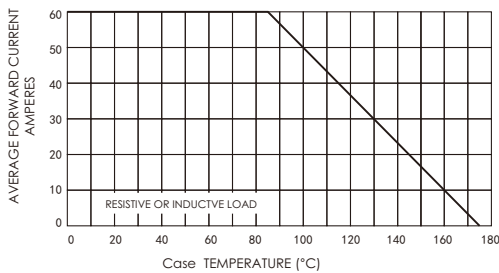


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

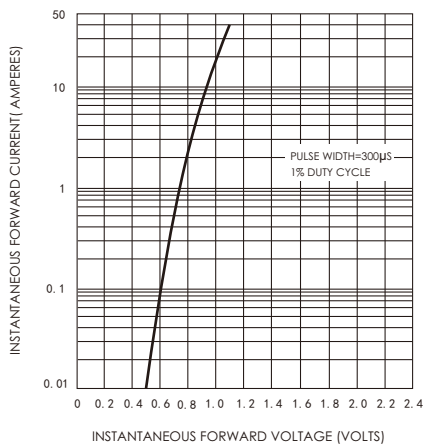


FIG.5-TYPICAL JUNCTION CAPACITANCE

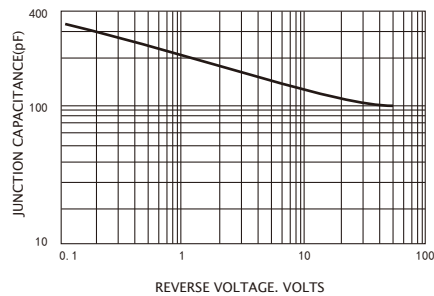


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

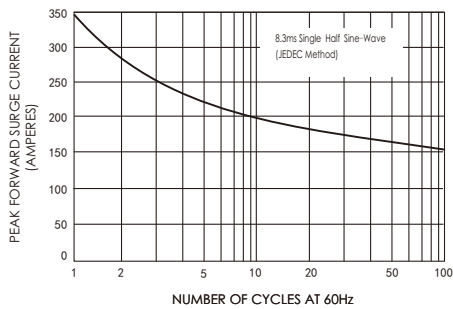


FIG.4-TYPICAL REVERSE CHARACTERISTICS

