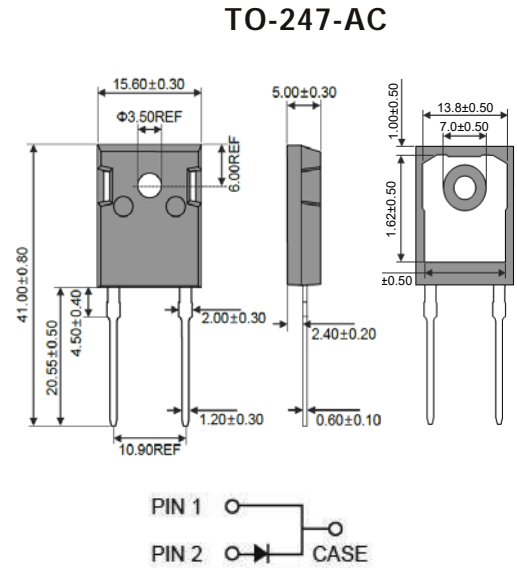
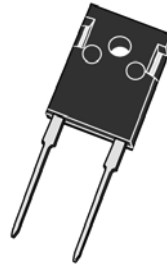


SUPERFAST RECTIFIER DATA SHEET
Features

- Ultrafast Recovery
- Low Reverse Leakage
- High Forward Surge Current Capability
- RoHS Product

Mechanical Data

- Case: TO-247AC, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026
- Weight: 5.6 grams (approx.)
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version

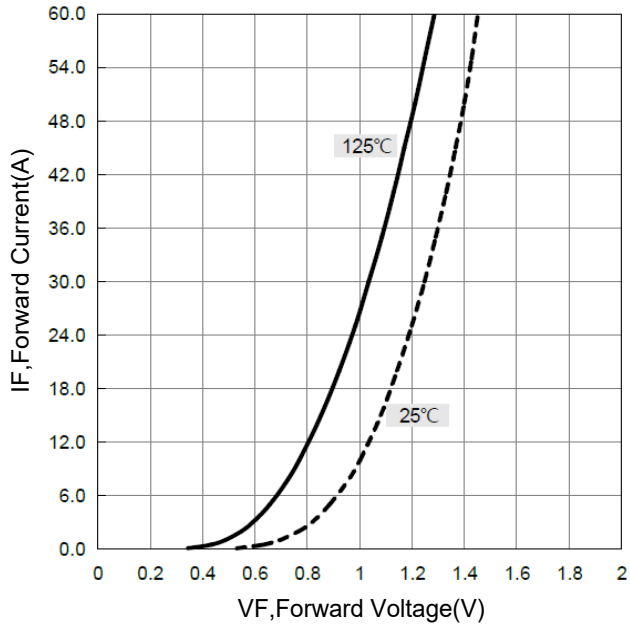
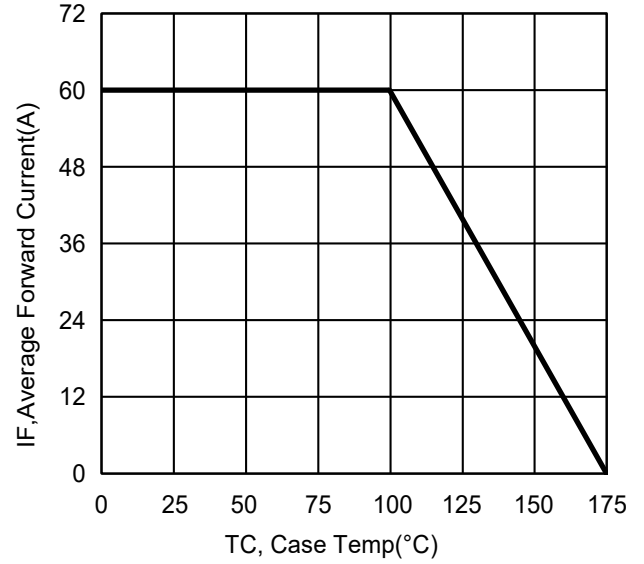
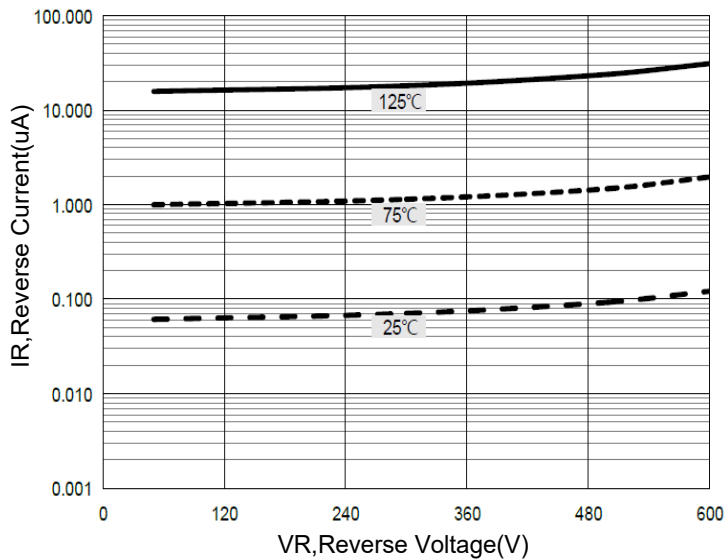

Absolute Maximum Ratings(Ta=25 C unless otherwise noted)

Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	V_{RRM}	600	V
Average Rectified Forward Current(Rated VR-20Khz Square Wave)-50% duty cycle	I_{FAV}	60	A
Forward Peak Surge Current(Rated Load 8.3ms Half Mssine Wave-According to JEDEC Method)	I_{FSM}	600	A
Operating Junction Temperature	T_J	-55~175	°C
Storage Temperature	T_{STG}	-55~175	°C
Typical Thermal Resistance(per leg)	$R_{\theta JC}$	0.5	°C/W

Package=TO-247AC-A

Electricity Character Per Diode(Ta=25 C unless otherwise noted)

Item	Test Condition	Value(min)	Value(typ)	Value(max)	Unit
V_R	$T_j=25^\circ\text{C}, I_R=100\mu\text{A}$	600	—	—	V
I_R	$T_j=25^\circ\text{C}, V_R=600\text{V}$	—	—	0.01	mA
	$T_j=125^\circ\text{C}, V_R=600\text{V}$	—	—	0.10	mA
V_F	$T_j=25^\circ\text{C}, I_F=60\text{A}$	—	1.45	1.7	V
	$T_j=125^\circ\text{C}, I_F=60\text{A}$	—	—	1.6	V
T_{rr}	$I_F=1\text{A}, \text{diff}/\text{dt}=200\text{A}/\mu\text{s}, V_{DD}=30\text{V}$	—	30	40	ns

Figure.1 - Typical Forward Characteristics

Figure.2 - Forward Derating Curve

Figure.3 - Typical Reverse Characteristics


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