


## NPT Trench IGBT

**1200 V, 25 A**

### **FGA25N120ANTDTU**

Using 's proprietary trench design and advanced NPT Technology, the 1200 V NPT IGBT offers superior conduction and switching performances, high avalanche ruggedness and easy parallel operation. This device is well suited for the resonant or soft switching application such as induction heating, microwave oven.

- NPT Trench Technology, Positive Temperature Coefficient
  - Low Saturation Voltage:  $V_{CE(sat), typ} = 2.0 \text{ V}$   
@  $I_C = 25 \text{ A}$  and  $T_C = 25^\circ\text{C}$
  - Low Switching Loss:  $E_{CE off, typ} = 0.96 \text{ mJ}$   
@  $I_C = 25 \text{ A}$  and  $T_C = 25^\circ\text{C}$
  - Extremely Enhanced Avalanche Capability
  - This Device is Pb Free Halide, Free and RoHS Compliant
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- Induction Heating, Microwave Oven

$R_{\theta JC}$ (IGBT)	Thermal Resistance, Junction to Case		



( $T_C = 25^\circ\text{C}$  unless otherwise noted)

$V_{FM}$	Diode Forward Voltage	$I_F = 25\text{ A}$	$T_C = 25^\circ\text{C}$	–	2.0	3.0	V
			$T_C = 125^\circ\text{C}$	–	2.1	–	
$t_{rr}$	Diode Reverse Recovery Time	$I_F = 25\text{ A},$ $di_F/dt = 100\text{ A}/\mu\text{s}$	$T_C = 25^\circ\text{C}$	–	235	350	ns
			$T_C = 125^\circ\text{C}$	–	300	–	
$I_{rr}$	Diode Peak Reverse Recovery Current		$T_C = 25^\circ\text{C}$	–	27	40	A
			$T_C = 125^\circ\text{C}$	–	31	–	
$Q_{rr}$	Diode Reverse Recovery Charge		$T_C = 25^\circ\text{C}$	–	3130	4700	nC
			$T_C = 125^\circ\text{C}$	–	4650	–	









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