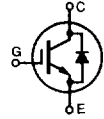


# Discrete IGBT with FAST Diodes

Ultra High Speed  
IGBTs = Suffix C



## High Speed Series

$V_{CES}$ V	$I_{C(25)}$ A	$V_{CE(SAT)}$ max V	$t_{tr}$ typ ns	TO-220 (P) 	PLUS247™ (X) 	TO-268 AA TO-204 (T) (M) 	ISOPLUS247™(R) 	SOT-227B (N) 
				TO-263 (A) 	TO-247 (H) 	ISOPLUS220 (C) 	TO-264 (K) 	PLUS264™ (B) 

LOW SATURATION VOLTAGE TYPES									
600	40	2.0	200			▶ IXGH28N60BD1	▶ IXGT28N60BD1		
	60	1.7	400			IXGH31N60D1	IXGT31N60D1		
	66	1.8	200					▶ IXGR39N60BD1	
	75 75	1.8 1.7	200 500			IXGH39N60BD1			IXGR60N60U1
1000	20	3.5	1000	IXGA12N100U1*	IXGH12N100U1*				
	20	3.5	1000	IXGP12N100U1*					
	34	3.5	750		IXGH17N100U1*				
	50	3.5	500		IXGH25N100U1*				
HIGH SPEED TYPES									
600	14	2.0	45	IXGA7N60CD1					
	14	2.0	45	IXGP7N60CD1					
	24	2.1	120		IXGH12N60BD1				
	24	2.7	55	IXGA12N60CD1	IXGH12N60CD1				
	24	2.7	55	IXGP12N60CD1			▶ IXGC12N60CD1		
	40	2.0	100		IXGH20N60BD1	IXGT20N60BD1			
	45	2.5	55					▶ IXGR32N60CD1	
	48	2.5	55		IXGH24N60CD1	IXGT24N60CD1			
	60	1.8	130		IXGH30N60BU1				
	60	1.8	130		IXGH30N60BD1				
	60	2.5	80		IXGH32N60BD1	IXGT32N60BD1			
	60	2.5	80		IXGH32N60BU1				
	60	2.5	55		IXGH32N60CD1	IXGT32N60CD1			
	70	2.2	120						▶ IXGR40N60BD1
75	2.5	75						▶ IXGR40N60CD1	
75	2.2	120			▶ IXGX40N60BD1				
75	2.5	75						▶ IXGN40N60CD1	
**75	2.3	150						▶ IXGR50N60BD1	
**75	2.3	150		IXGX50N60BD1				IXGK50N60BD1	
**75	2.3	150						IXGN50N60BD2	
**75	2.3	150						IXGN50N60BD3	
**75	2.3	150						▶ IXGB75N60BD1	
1000	20	4.0	500	IXGA12N100AU1*	IXGH12N100AU1*				
	20	4.0	500	IXGP12N100AU1*					
	34	4.0	450		IXGH17N100AU1*				
	50	4.0	600		IXGH25N100AU1*				
1200	30	3.8	160		IXGH15N120CD1	IXGT15N120CD1			
	30	3.2	250		IXGH15N120BD1	IXGT15N120BD1			
	50	4.0	600		IXGH25N120AU1*				
	70	4.4	115						IXGK35N120CD1
	70	3.2	160						IXGK35N120BD1

Notes: \* - not for new design \*\* - Lead terminal current limit. IGBT/Diode circuit connections:  
 \_U1 & \_D1: Ultrafast FRED or HiPerFRED diode respectively connected anti-parallel to IGBT  
 \_D2: Ultrafast HiPerFRED Diode anode connected to IGBT collector (Boost configuration)  
 \_D3: Ultrafast HiPerFRED Diode cathode connected to IGBT emitter (Buck configuration)

Outline drawings on page 91-100.