Ignition IGBTs and Relevant Peripheral Components

Littelfuse offers a broad portfolio of high performance Ignition IGBTs for gasoline-powered passenger vehicles and motorcycles. In addition, Littelfuse has extensive experience with protection devices which ensures we can cover your needs for reliable automotive quality grade designs.

Littelfuse Ignition IGBTs manage and control the current across the coil for a precise spark generation. They contain an integrated clamp structure and gate ESD protection in the silicon. Ignition IGBTs provide an exceptionally low saturation voltage while conducting the current.

More than 28 million new cars are powered by Littelfuse Ignition IGBTs every year around the world. Also, Littelfuse Ignition IGBTs are the preferred solution for high performance premium motorcycles.

Ignition IGBTs

Part Number	BV_{CES} @ I_C V	I_{Cmax} A	$V_{CE(sat)}$ V	E_{AS} mJ	Fig. No.	Package style Outline drawings on pages O-60...O-64
NGD8205ANT4G	350	20	1.30	250	L004	
NGD18N40ACLBT4G	400	18	1.80	400		L004 TO-252AA
NGD8201ANT4G	400	20	1.30	250		
NGD8201BNT4G	400	20	1.50	435		
NGD15N41ACLT4G	410	15	1.90	250		
NGD8209NT4G	410	12	1.80	274		
NGD18N45CLBT4G	450	18	2.07	360		
NGB8207ABNT4G	365	20	1.75	500	L011b	
NGB8206ANTF4G	350	20	1.30	250		L011b TO-263AB
NGB8207BNT4G	365	20	1.50	500		
NGB8204ANT4G	400	18	1.80	400		
NGB8202ANT4G	400	20	1.30	250		
NGB18N40ACLBT4G	400	18	1.80	400		
NGB15N41ACLT4G	410	15	1.90	250		
NGB8245NT4G	450	20	1.10	158		

TVS Diodes for Ignition Applications

Part Number	V_R Range min. V	max. V	P_{PP} 10x1000µs V	P_{PP} 10x15ms mJ	Fig. No.	Package style Outline drawings on pages O-60...O-64
TPSMB	5.8	468	600		L003a	L003a/b DO-214AA/AB
TPSMB-VR	6.5	150	600			
TPSMC	10.2	77.8	1500	2200 load dump	L003b	
TPSMD	10.0	85	3000			
SLD8S	12.0	57	7000		L007	L007 SMTO-263
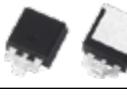
Resettable PTCs for Ignition Applications

Part Number	Current @ 0°C HOLD A	TRIP A	Current @ 25°C HOLD A	TRIP A	Current @ 60°C HOLD A	TRIP A	Time to Trip max. s	Resistance @ 25°C min. Ω	max. Ω	Tripped State Power Dissipation max. W	Fig. No.	Package style Outline drawings on pages O-60...O-64
nanoASMDC016F-2	0.18	0.7	0.16	0.45	0.012	0.028	0.3	1.1	5	0.5	L008	L008 1206