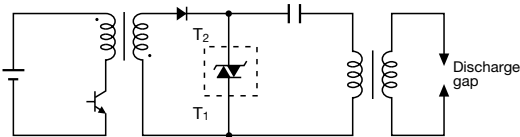


PNPN Switch

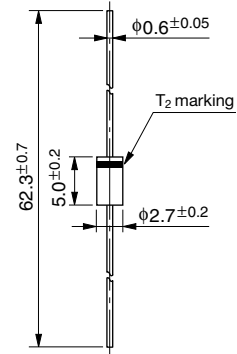
ET0131, ET0141, ET0151, ET0201

Example of application circuit (ignition)



External Dimensions

(Unit: mm)



Weight: Approx. 2.6g

Absolute Maximum Ratings

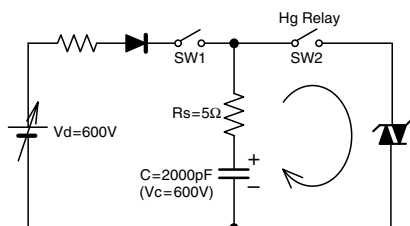
Parameter	Symbol	Ratings				Unit	Conditions
		ET0131	ET0141	ET0151	ET0201		
Non-repetitive surge voltage	V_{DSM}^+	600				V	$C=2000\text{pF}$, $R_s=5\Omega$, $T_j=25^\circ\text{C}$, $V_c=600\text{V}$ (T_2^+ , T_1^-), 1 shot, Refer to Fig1
Repetitive off-state voltage	V_{DRM}^+	90	115	115	170	V	$T_j=-40^\circ\text{C} \sim +125^\circ\text{C}$, only (T_2^+ , T_1^-)
RMS on-state current	$I_{T(RMS)}$	0.6				A	DC, $T_\theta \leq 112^\circ\text{C}$
Surge on-state current	I_{TSM}	80				A	$T_a=25^\circ\text{C}$, $W_p=10\mu\text{s}$, Half-sine-wave 1 cycle, peak value, $f=50\text{Hz}$
Rate-of-rise of on-state current	di_T/dt	30				A/ μsec .	
Junction temperature	T_j	$-40 \sim +125$				$^\circ\text{C}$	
Storage temperature	T_{stg}	$-40 \sim +125$				$^\circ\text{C}$	

Electrical Characteristics

Parameter	Symbol	Ratings				Unit	Conditions
		ET0131*	ET0141	ET0151*	ET0201		
Breakeover voltage	V _{BO} ⁺	120~138	134~146	142~157	190~210	V	
Breakeover current	I _{BO} ⁺	150max	100max			μA	
Off-state leakage current	I _{DRM} ⁺	10max				μA	V _D =V _{DRM} ⁺
Holding Current	I _H ⁺	25typ				mA	
	I _H ⁻	20typ					
On-state voltage	V _T	±2.5				V	I _T =±10A
Insulation resistance	R	100min				MΩ	Between lead and side of plastic body (Except surface for leads)
Thermal resistance	R _{th(j-ℓ)}	20max				°C/W	Between junction and lead

*: Under development

Fig.1



As the SW2 remains open, close the SW1 to charge the capacitor, $C=2000\text{pF}$, up to 600V to open the SW1. After the capacitor charged up to the certain voltage, close the SW2 and impose voltage on the die.

ET0131, ET0141, ET0151, ET0201