

KEY FEATURES

- JAN/JANTX/JANTXV STANDARD PRODUCTS
- QUALIFIED PER MIL-PRF-19500/385
- LOW ON RESISTANCE
- FAST SWITCHING
- HIGH OFF ISOLATION
- S LEVEL EQUIVALENT SCREENING OPTIONS
- RADIATION TOLERANT
- SECOND SOURCE FOR VISHAY & SILICONIX



Part Number	Package	19500/	Breakdown Voltage	Current	$R_{DS(on)}$
2N4856	T0-18	385	40V	175mA	25 Ω
2N4857	T0-18	385	40V	100mA	40 Ω
2N4858	T0-18	385	40V	80mA	60 Ω

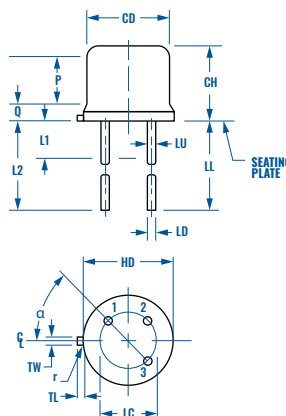
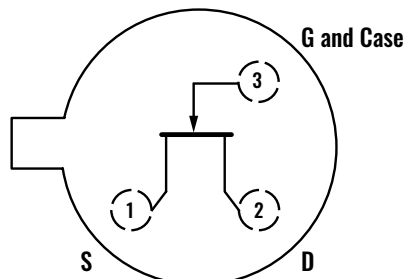
ABSOLUTE MAXIMUM RATINGS

Gate-Source Voltage	-40V	Storage Temperature	-65 to 200°C
Gate Current	50mA	Operating Junction Temperature	-65 to 200°C
Lead Temperature (1/16 from case, 10 sec)	300°C	Power Dissipation Derating	1800mW 10.3mW/°C to TC \geq 25°C

ORDERING GUIDE

JAN2N4856	JANTX2N4856	JANTXV2N4856
JAN2N4857	JANTX2N4857	JANTXV2N4857
JAN2N4858	JANTX2N4858	JANTXV2N4858

PACKAGE OUTLINE & PIN CONNECTIONS



Ltr	Dimensions			
	Inches		mm	
	Min.	Max.	Min.	Max.
CD	0.178	0.195	4.52	4.95
CH	0.170	0.210	4.32	5.33
HD	0.209	0.230	5.31	5.84
LC	0.100 TP		2.54 TP	
LD	0.016	0.021	0.41	0.53
LL	0.500	0.750	2.70	19.05
LU	0.016	0.019	0.41	0.48
L1	0.050			
L2	0.250		6.35	
P	0.100		2.54	
Q	0.030			
TL	0.028	0.048	0.71	1.22
TW	0.036	0.046	0.91	1.17
r	0.010			
alpha	45° TP			

ELECTRICAL SPECIFICATIONS

Typical @ 25°C unless otherwise noted

Parameter		Symbol	Min.	Max.	Unit
Gate-Source Breakdown Voltage $V_{DS} = 0Vdc, I_G = 1.0Adc$		$V_{(BR)GSS}$	-40		Vdc
Gate-Source "Off" State Voltage $V_{DS} = 15Vdc, I_D = 0.5nAdc$	2N4856 2N4857 2N4858	$V_{GS(on)}$	-4 -2 -0.8	-10 -6 -4	Vdc Vdc Vdc
Gate Reverse Current $V_{DS} = 0Vdc, V_{GS} = -20Vdc$ $V_{DS} = 0Vdc, V_{GS} = -15Vdc$		I_{GSS}		-0.25 -0.25	nA nA
Drain Current $V_{DS} = 15Vdc, V_{GS} = -10Vdc$ $V_{DS} = 15Vdc, V_{GS} = 0Vdc$	2N4856 2N4857 2N4858	$I_{D(off)}$	50 20 8	0.25 175 100 80	nA mA mA mA
Static Drain - Source "On" State Resistance $V_{GS} = 0Vdc, I_D = 1mAdc$	2N4856 2N4857 2N4858	$R_{DS(on)}$		25 40 60	Ω Ω Ω
Drain Source "On" State Voltage $V_{GS} = 0Vdc, I_D = 20mAdc$ $V_{GS} = 0Vdc, I_D = 10mAdc$ $V_{GS} = 0Vdc, I_D = 5mAdc$	2N4856 2N4857 2N4858	$V_{DS(on)}$		0.75 0.5 0.5	Vdc Vdc Vdc
Small Signal, Common Source Reverse Transfer Capacitance $V_{GS} = -10Vdc, V_{DS}, V_D = 0Vdc, f = 1.0MHz$ $C_1 = 0.1\mu F, L_1 = L_2 \geq 500\mu H$		C_{rss}		8	pF
Small Signal, Common Source Short-Circuit Input Capacitance $V_{GS} = -10Vdc, V_{DS}, V_D = 0Vdc, f = 1.0MHz$ $C_1 = 0.1\mu F, C_2 = 20.1m$ $F_{L1} = L_2 \geq 500\mu H$		C_{iss}		8	pF
Turn On Delay Time	2N4856 2N4857 2N4858	$t_{D(on)}$		6 6 10	nS nS nS
Rise Time	2N4856 2N4857 2N4858	t_r		3 4 10	nS nS nS
Turn Off Delay Time	2N4856 2N4857 2N4858	$t_{d(off)}$		25 50 100	nS nS nS